

ezSuite for XStudio, DCS, & Maestro

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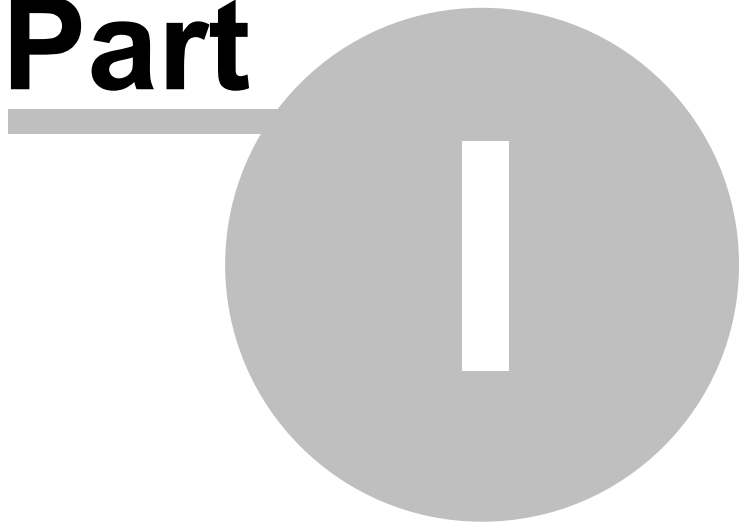
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Welcome to ezSuite

Part



The Ultimate Log Editing, Audit Reporting and Reconciling Tool for XStudio, DCS and Maestro!

ezSuite is a single application that combines capabilities for creating and editing XStudio, DCS and Maestro generic log files, generating audit reports and reconciling logs.

ezSuite provides a true Windows editing environment, allowing additional conveniences in the log editing process, including drag and drop moving of carts on the log, drag and drop addition of carts from the inventory, and hourly content totals that are based on the selected inventory. Audit reporting conveniences include on-screen dynamic slicing and dicing of audit report data without having to re-run reports or reload audit report data from file.

ezSuite allows for a virtually unlimited number of station configurations, including the ability to easily view and/or edit pre-merged traffic logs. Log source directories can be different for each station and a station's associated inventory file can be located somewhere other than the log directory.

ezSuite is particularly well-suited for an enterprise environment where audited performance data for several sites and/or time zones is reviewed and analyzed or where multiple logs are generated for several sites and may need last-minute editing before delivery to a remote site.

Log files created or edited with **ezSuite** meet Computer Concepts Corporation's published Generic Log File Specification version 1.5.

ezSuite reads audit data files adhering to Computer Concepts' DCS Audit File (.ADT) Specification, version 1.6. This includes all DCS software versions and all Maestro software versions through v3.3. **ezSuite** also supports XStudio-specific extended transaction and status codes.

The Origins of ezSuite

ezSuite was originally created to replace Computer Concepts Corporation's original separate DOS products, known as "**CMED**" and "**CMAD**", while adding the ability to compare or "reconcile" a log (the predicted or desired performance) with audit data (the actual performance).

"**CMED**" is a DOS application that is a good editor for CCC's generic logs but has shortcomings in the areas of printing a log, validating logs, and printing inventory lists. It is also difficult to administer, requiring multiple shortcuts (in Windows) and multiple configuration files especially created and maintained for editing purposes.

"**CMAD**" is a DOS application that is a good reporting tool for CCC's audit files but has shortcomings in the areas of viewing or printing a report and the ease with which you can "slice and dice" report information to view only the data that is important to you. It is also difficult to administer, requiring multiple shortcuts (in Windows) and multiple configuration files especially created and maintained for audit reporting purposes. **CMAD** is also dependent on your PC's time zone settings and requires changes to those settings if the audit data to be reviewed was created with time zone settings that vary from your PC's settings.

ezSuite is an ideal replacement for the original tools provided for DCS and Maestro because of its ease-of-use, flexibility and time-zone-agnostic design.

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1.1 Features

ezSuite offers a number of features to make the task of editing logs, producing audit reports and reconciling logs for XStudio, DCS™ and Maestro™ systems easier, faster and more efficient.

General Features

- Can be used with DCS, Maestro and XStudio audio delivery systems.
- **Integrated context-sensitive help** in all dialogs.
- **Runs on 32-bit and 64-bit Windows operating systems** (Windows 2000 and above)
- **No dependencies.** No access to the host audio system is required. You can create and edit logs, run audit reports and reconcile logs anywhere..

Log Editing Features

- Edit and create logs for an **unlimited number of stations**, including pre-merged traffic-only logs
- **Drag and drop** operation for **moving audio items** around on the log, including scrolling the log view while dragging. Drag and drop audio items (carts) from the station inventory to the log.
- **Edit multiple logs** concurrently.
- **Copy** audio items (carts) from and **Paste** audio items (carts) to the log. Copy a spot from one log and paste it into another.
- **Log searching** by cart number or description.
- **Hourly log content totals**, calculated from the inventory (if used), along with directive segment time totals. Directive segment totals, too.

- **Log Validation.** Validation reports can be printed or saved to file. You can validate multiple logs, each in its own window.
- Print logs, including **print preview** and **selective printing** of pages.
- **Inventory printing**, including print preview and user-defined filtered inventory lists.
- **Log Template** support - create and edit log templates (*.FMT).
- Keystrokes for editing match the original DOS log editor (CMED) in all applicable cases.
- **No dependencies.** A log can be created and/or edited with no access to cart inventory information or host audio system. You can create or edit logs anywhere.

Audit Reporting Features

- **View multiple reports simultaneously** - great for side-by-side comparisons. Multiple report windows can be tiled horizontally or vertically, as well as cascaded.
- **Multiple data views** - change how you look at audit data on the fly. You can even create your own custom views!
- **Dynamic filtering of cart numbers** (audio items) on the fly.
- **Dynamic filtering of transaction types, status codes and play channels** without having to create a report template.
- **Create new templates on the fly** from the main display. Have the right combination of data displayed? Just click a button, provide a name for the template, and you're all done!
- **Sort displayed data by column** - on the fly.
- **Select and apply report templates** from the main display, on the fly.
- Support for a virtually **unlimited number of stations**.
- Create and maintain a virtually **unlimited number of report templates**, which include selected transaction types, selected status codes, selected audio playback channels, cart filter and data "view" information. The number of stored templates is limited by available disk space only.
- **Selective printing.** Print only the hours you wish using available hourly data views.
- **Copy to Clipboard** - copy selected report line items to the Windows clipboard for subsequent pasting in another application, such as an e-mail.
- **Save reports to file** in any of three formats, including CSV (Comma-Separated Values).
- **Create reconcile export reports** for direct use by Selector™ and MusicMaster music scheduling systems, and CBSI traffic system. See the section on **Saved Report File Types** for more information.
- **No dependencies.** An audit file created anywhere in the world can be viewed and/or printed without having to change time zone settings on the host PC.

Log Reconcile Features

- Compares the complete original log used by XStudio, DCS, or Maestro with audited performance data.

- **Overrun and underrun discrepancies** are detected and displayed. If items from another log day are played, the reconcile process detects and displays these discrepancies.
- **Multiple Data Views.** Change how you look a reconcile data on the fly.
- **Dynamic Filtering** of data. Filter displayed data to look at only logged items, only discrepancies, and apply cart filters to drill down to only the information you are interested in.
- **Sort displayed data** by column - on the fly.
- Printed reports and **selective printing**. Print all information or print only the hours or records you wish, using available hourly data views.
- **Save reports to a file** for other usage. Reports are saved as standard ASCII text.
- Support for a virtually **unlimited number of stations**.
- **View multiple reports simultaneously**. Great for reviewing log overrun or underrun situations.
- **No dependencies**. Logs and audit data created anywhere in the world can be reconciled, viewed and printed without having to change time zone settings on the host PC.

1.2 What's New

Here are the latest changes, enhancements and corrections to ezSuite by version number and date. For information on less-recent changes and enhancements, see the [Revision History](#) topic.

Version 2.7.2.140 - 06/08/2015

1. **Enhancement.** Station configuration information can now be exported and imported in [Preferences](#). Exported station information can be used by ezAudit, ezEdit and XStudio with minor adjustments after importing the information into one of these applications.
2. **Enhancement.** Minor changes have been made to some dialogs to improve text readability in some operating systems, most notably Windows Server 2003.
3. **Change.** A new property, [Force Time-stamp Update](#), has been added in the **Miscellaneous Settings** page of Preferences. When enabled, ezSuite will manually update a log file's time stamp after saving the log. Prior to this version of ezSuite, the default behavior was to always manually update the time stamp. Now, ezSuite **will not** manually update the time stamp as a default as this action will produce undesirable results if the target folder for the log is located on another PC running with different time zone settings. The manual time stamp update was originally implemented for users saving logs to a Novell Netware server that did not have long file name support enabled. If you are using ezSuite in such an environment, enable this property to return to ezSuite's original behavior.
4. **Fix.** When displaying the log or audit report selection dialog, the **Scanning Files** information panel would very occasionally get hidden behind the selection dialog as ezSuite was scanning for available files.

Version 2.7.1.125 - 10/24/2014

1. **Enhancement.** ezSuite now detects Windows 8.1 and Windows Server 2012 R2 operating systems and adjusts its display accordingly.
2. **Fix.** When opening or editing a log, an "invalid time encode" error could occur. This happened if the last hour of the day had more than 60 minutes worth of content and a directive was placed at or near the end of the hour. This scenario caused the estimated air play time to exceed 23:59:59, which raised the error. Now, ezSuite tests for this condition and adjusts accordingly.

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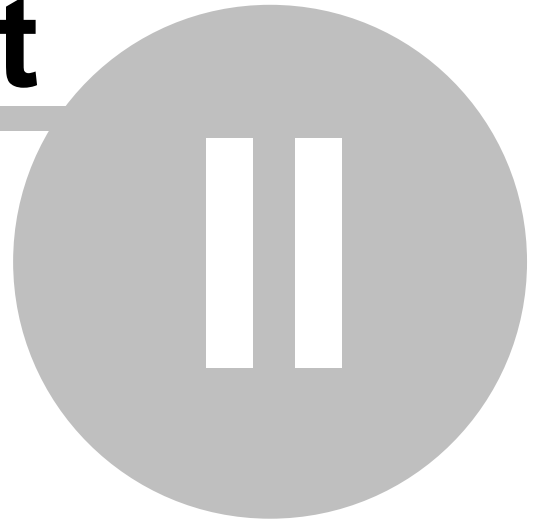
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System Requirements & Installation

Part



ezSuite requires certain hardware and Windows operating system minimums. You must also install the ezSuite software on the PC using an installation program.

This section documents the system requirements for ezSuite and covers the process of installing, updating and removing the ezSuite software.

2.1 System Requirements

ezSuite requires a PC running Microsoft Windows™ 2000 Pro, XP Pro, Vista, Windows 7 or Windows 8.

- a 100% IBM-compatible Pentium™ personal computer.
- 64 MB RAM (Windows 2000), 128 MB RAM (Windows XP), 1GB RAM (Vista, Windows 7), 2GB RAM (Windows 8)
- 20 MB free disk space (for this application and documentation only)
- compatible VGA, super VGA, XGA or 8514/A monitor, with adapter, running 800x600 minimum display resolution (1024x768 highly recommended)
- Microsoft mouse or compatible pointing device.
- A LAN card (NIC), known to be working (if you will be connecting to a LAN for audit data file retrieval)

Although not required, to use ezSuite effectively, you need access to the XStudio, DCS, or Maestro log files, inventory files and audit data files. Typically, this means you must be connected to the network (LAN) in which the XStudio, DCS, and/or Maestro units are running. DCS and Maestro require a common location for log, audit and inventory data files. It is these files that ezSuite needs to be able to access. Be sure that your system administrator has provided you the necessary access rights to these file locations. For logs, you will need both read and write access (to open and save log files). For inventory files, you need only have read rights (to open and view the inventory). For audit data files you need only have read rights to open the audit data file for report generation.

2.2 Installing ezSuite

The ezSuite installation program provides step-by-step instructions on every screen displayed during the installation. Follow the instructions on each screen to install ezSuite.

Before you install

1. Close all other programs, including any anti-virus programs.
2. Log on to your computer with administrator privileges.

To install ezSuite from a downloaded file

1. After you have downloaded the installation program to your computer, locate the setup program, **ezSuiteSetup.exe**, in the folder to which you downloaded the file. **[Double-click]** on the setup program to begin installation.
2. Follow the instructions on each screen to install the software.

Updating ezSuite

1. If you have downloaded or otherwise received a revision for ezSuite, the process for updating the software is virtually identical to the initial installation. However, the installation dialogs may be a bit different. When updating, you are not typically given an opportunity to select the target folder for installation, as that choice has already been made in a previous installation.
2. You may be prompted that an old version of ezSuite has been found and that it must be uninstalled (removed) before continuing with the update. If you see this prompt when updating ezSuite, you should answer "Yes" to remove the old version, and if prompted to confirm the removal of the old version, again answer "Yes".
3. On occasion, updating ezSuite may require some additional tasks be performed during the update. Such tasks might include validating and/or updating your registration and making adjustments to your preferences settings. If these tasks are needed, you will be prompted for any input required and notified if the update task could not be completed successfully.



You must have administrator privileges to perform an update on all supported operating systems.

To Uninstall ezSuite

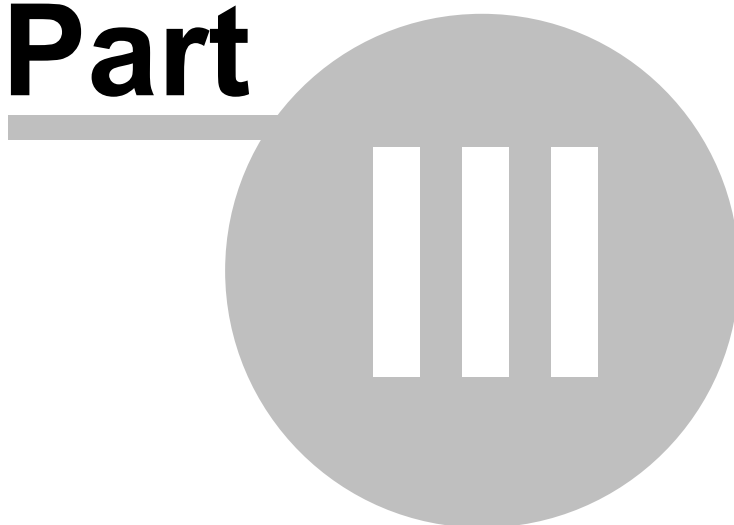
To remove ezSuite from your PC, select the Control Panel applet Add/Remove Programs. Select ezSuite and click on the **[Remove]** button. Follow the prompts to uninstall the software.



Only files originally installed are removed. Event log files and your preferences files are not removed. See the topic on [Application-Created Files](#) for more information on files that are installed or created by ezSuite.

Configuration

Part



In order to use ezSuite, the application needs to know about the station(s) for which you will editing logs, running audit reports and reconciling.

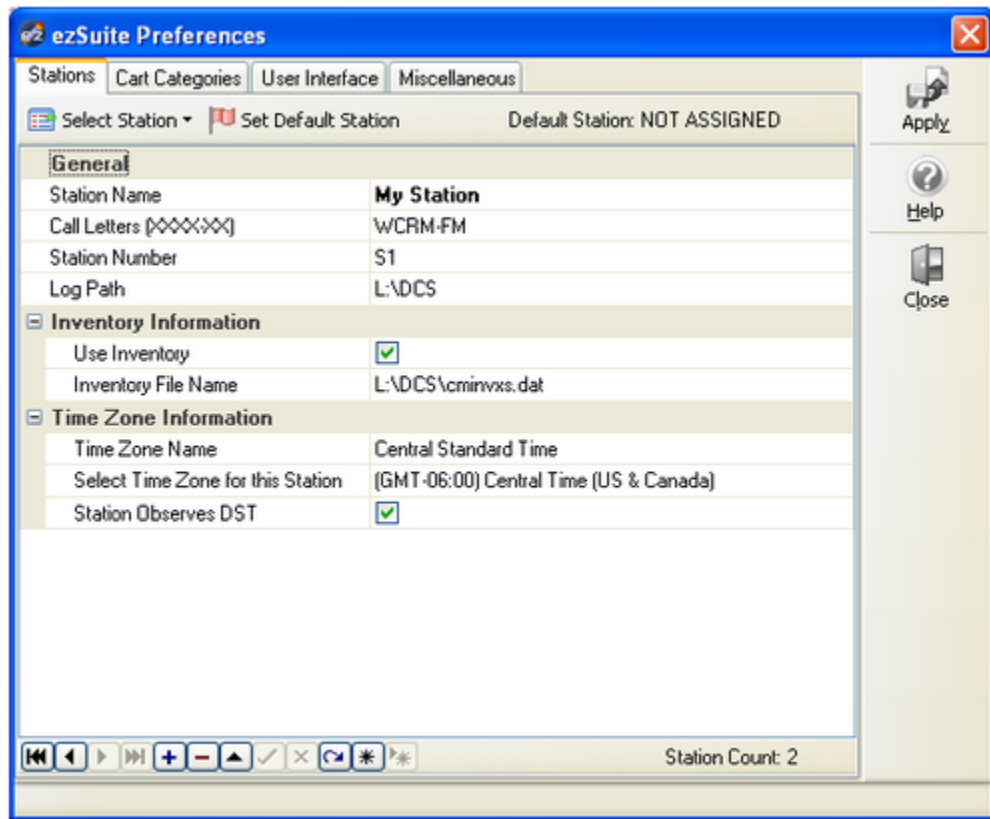
In the preferences area, you define the stations, their call letters, location of the log files and associated inventory files.

Optionally, you can also define cart filters (or masks) that can be used to "filter" the inventory information to display only those carts that meet your filter criteria, plus apply unique color combinations to defined cart categories.

You can also enable a security feature that prevents users from changing the preferences without a password.

3.1 Stations Setup

In this area, you define the various stations for which you will be editing logs and creating audit and reconciliation reports. Each station can be named something that's meaningful to you. You also identify the station's call letters, log path, inventory file and the station's time zone information.



Maintaining Stations

Add a Station. To add a station to the Configured Stations list, click on the "+" button on the navigation toolbar. A new station record will be created and you can fill in the fields with the appropriate information. To save your changes, click on the **"Save Changes (Post Edit)"** button, represented by a check mark.



Float your mouse over the navigation toolbar for hints on the use of each of the buttons.

Edit a Station. To edit information, select the station to be edited by either clicking on the **[Select Station]** button to display the stations list, or use the navigation buttons to move among the stations.



Station selection list

Once you have selected the station you wish to edit, make appropriate changes and click on the **"Save Changes"** (Post Edit) button, represented by a check mark.

Delete a Station. To delete a station configuration, select the station you wish to delete by clicking on the station name in the station list, or use the navigation buttons to move among the stations. Once you have selected the station you wish to delete, click on the **"Delete Record"** (-) button on the navigation toolbar. After confirming you wish to delete, the station information will be deleted.



Deleting a station definition removes all information about that station. If you didn't mean to delete the station, you must close the Preferences dialog and choose not to save the changes. When you re-open Preferences, the Configured Stations list is restored to its last saved state. Be aware that not saving changes on exiting the Preferences dialog saves no changes you may have made while working in the Preferences dialog.

Setting a Default Station

If desired, you can make one of the defined stations the "default station". If a default station is defined, it is the station initially displayed when opening a new log, log validation report, audit report or log reconcile report.

To set the default station, select a station and click on the **[Set Default Station]** button to make it the default station.

Station Setup Field Details

Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed. Items marked **??** are conditional, depending on other station settings.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Station Name	✓	Identifies the station you're configuring and is used within ezSuite only. It appears on station selection lists and other places in ezSuite where the station name helps identify what document you are working with. The name entered here should be unique so as to easily distinguish among station records.
Call Letters	✓	The call letters of this station. The information is placed in the log file. Maestro and DCS use this information to display station call letters.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Station Number	✓	The assigned station number (in XStudio, DCS or Maestro) for this station. Typically, it would be in a range of 1..9. The station number can be a one or two-character entry.
Log Path	✓	The storage location (drive, folder) of logs and audit data for a station. UNC paths can be used, if desired, but may slow performance.
 If you are using a UNC path or mapped network drive, ensure that you are logged in to the host server machine or you will get an error message that no log files can be found when you select a station in the Open Log dialog.		
Use Inventory		Check this item if you wish to use an XStudio, DCS, or Maestro inventory list when editing logs for this station. An inventory is also required for log validation reports.
Inventory File	??	If you have checked the " Use Inventory " item, then you must select a valid inventory for this station. If the " Use Inventory " item is not checked, then you do not need an entry for this field. You can use the ellipse button adjacent to the field to browse for the inventory file you wish to use.
Time Zone Name	NA	The official name of the selected time zone. This value is automatically updated each time you select a different time zone for the station and cannot be manually changed by the user.
Station Time Zone	✓	In order to properly calculate the real time of audit records, the time zone in which the audit file was created must be known. Select the time zone from the list of available zones displayed.
 You can click on the button adjacent to the time zone drop-down list to set the time zone value to your PC's current time zone.		
If you have selected a time zone that is not correct, audit reports displayed for this station will be "off", time-wise. For more information on possible causes and corrections, see the sections on Specific Error Messages and Audit Times Information.		
Station Observes DST	✓	Check this item if the XStudio, DCS, or Maestro machine that created the audit file data is set to observe DST (Daylight Savings Time). Most DCS systems DO NOT observe DST since April 2007 when the Energy Policy Act of 2005 went into effect, and most Maestro systems DO NOT observe DST. Check with your DCS or Maestro system administrator if you are unsure.

Importing and Exporting Station information

You may wish to save your station information for use with another ezSuite system or for archival purposes. ezSuite provides the means to export and import station information via the Stations context menu. **[Right-Click]** anywhere on the Stations page to invoke the context menu.

To export information, select the **Export Station Info** menu item. You'll be prompted to select a file name for exported information.

To import information, select the **Import Station Info** menu item. You'll be prompted to select the file

containing the station information. If you already have some stations defined in ezSuite, you have the option to replace them with the imported information or to append the imported information to the existing station information.



No duplicate checking is done when importing station information into existing station information using the option to append station records. You should check for duplicates when the import process has completed and remove any duplicates. You should also check your default station setting, particularly if you replace existing station information with imported information.

As a default, ezSuite uses the file extension **.stns** when exporting or importing station information. The information is stored in an ini file structure.

3.2 Cart Categories

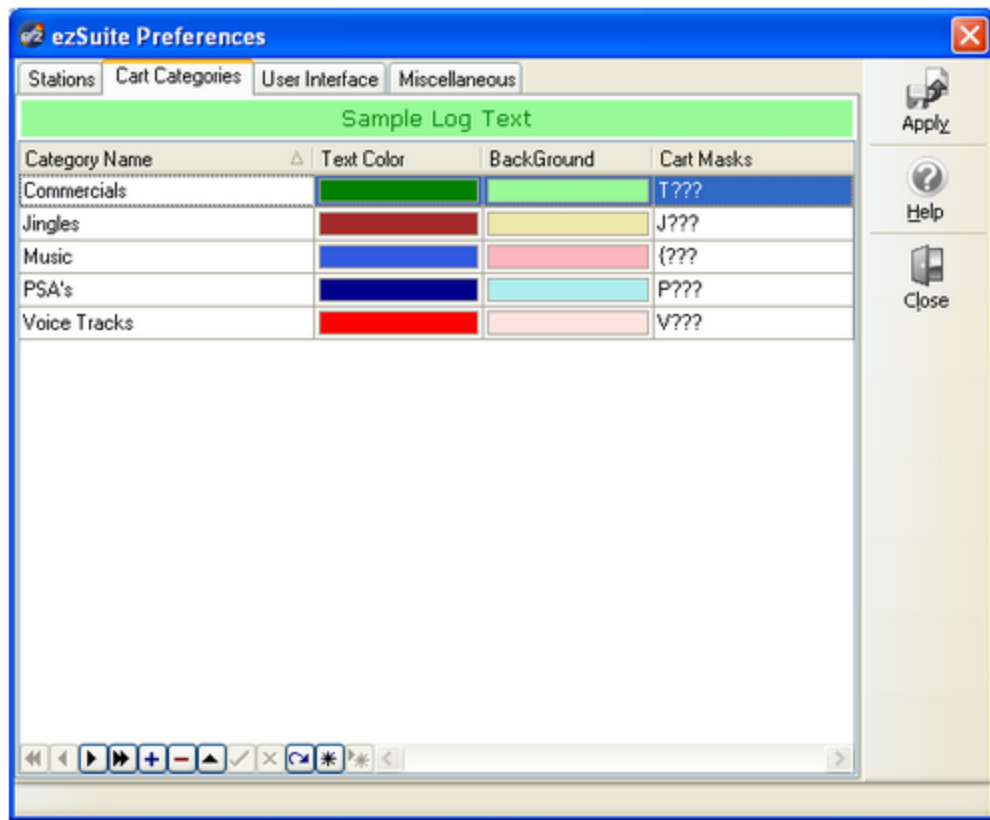
ezSuite provides the ability to create "**Cart Categories**", also known as Cart Filters. Cart categories are used to define audio categories for [filtering inventory lists](#), filtering audit report data, and to create [log color schemes](#) (background and text) that are used in the log display.

The initial display of the Cart Categories page shows a table of available (defined) categories, if any, and a navigator bar which can be used to add, edit and delete cart filters.

You can have as many categories as you wish with multiple cart masks in each category.



There must be **at least one** cart mask defined for each cart category you create.



Using Cart Categories with Logs

When applied to a displayed log, any cart number that matches any one of the individual cart masks within a defined Cart Filter (Cart Category) will be displayed with the text and background color associated with the cart filter. By using distinctive color combinations, you can more easily spot commercial clusters, for instance.

Using Cart Categories with Inventory Lists

When applied to an inventory list, any cart number that matches any one of the individual cart masks within a defined Cart Filter (Cart Category) will be **included** in the displayed inventory list. For

instance, the sample display shows several filter definitions, including one called "Commercials". You can see from the display that there is one cart mask associated with the Commercials definition, "C????". This filter definition means that, when selected, only carts beginning with the letter "C" will be displayed in the inventory list.

Using Cart Categories with Audit Reports

In audit reports, Cart Categories (Cart Filters) are used to control which cart numbers (audio items) are **included** in a report. This is useful if, for instance, you just want to see activity relating to commercials for external traffic log reconciliation or music for external music schedule reconciliation.



If you define duplicate cart masks for different categories, the cart number will be included in the first category the cart number matches. Categories are sorted alphabetically, by name.

Maintaining Cart Categories

Add a Filter Name. To add a filter, click on the "+" button and type in the name you wish to use for the new category when prompted. You'll also be prompted to enter an initial cart mask. You can also use the [Insert] key on the keyboard.



Float your mouse over any of the controls and a hint about the button or control's usage will be displayed.

Edit a Category Definition Name. To edit a filter name, select the name from the list, then click on the Category Name field and type your changes. Finish by clicking on the **"Save Changes"** (Post Edit) button. The [F2] keystroke also invokes edit mode. The content being edited will be the column you had selected when the [F2] key was pressed. For more information data navigation buttons, see the topic [Using Data Navigators](#).

Delete a Category Definition. To delete a cart category definition completely, select the category and click on the **"Delete"** button, represented by a "-" symbol (minus sign). After confirming that you want to delete, the category definition will be removed, including associated cart masks. The [Delete] key on the keyboard can also be used to delete categories.



Deleting a category also deletes all cart masks associated with it. If you didn't mean to delete the cart category, you must close the Preferences dialog and choose not to save the changes. When you re-open Preferences, the cart categories are restored to their last saved state. Be aware that not saving changes on exiting the Preferences dialog saves no changes you may have made while working in the Preferences dialog.

Editing Cart Masks. To edit a cart mask, [Double-Click] on the mask in the mask column. A [dropdown panel](#) displays, providing the means to add, edit, and delete individual cart masks.

A cart mask must be exactly 4 (four) characters in length. The mask table will not allow entries that are too short and will not accept more than 4 characters entered. For information on specific cart mask combinations that can be used, see the topic [Cart Masks Explained](#).

When all editing for a category is complete, save your changes by clicking on the **"Save Changes"** (Post Edit) data navigation button, represented by a check mark.

Importing and Exporting Cart Filters

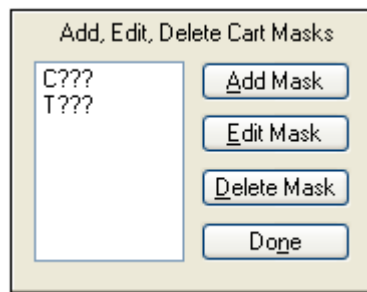
For convenience, you can import and export cart filter settings. [Right-Click] on the displayed filters table and select either **Import Cart Categories** or **Export Cart Categories**. In either case, you are prompted for a file name to import from or export to.



When importing cart categories and some categories already exist, you have the option to either add (append) the imported categories to the existing list or replace the existing categories with the imported categories.

3.2.1 Using the Cart Mask Edit Panel

ezSuite requires the creation of cart masks for applying filters to include only certain cart numbers. When cart masks need to be added, edited or deleted, the Cart Mask Edit Panel is displayed.



The panel is intended to make the tasks associated with cart mask maintenance easier and more fool-proof with buttons for adding, editing and deleting cart masks.

Add Mask Button

When the Add Mask button clicked, a dialog appears for entry of the new cart mask. The entered mask is validated to ensure it meets cart mask rules before being accepted and added to the cart mask list.

Edit Mask Button

To edit a cart mask in the list, select the item to be edited and click on the Edit Mask button. The mask text appears in a dialog for editing. The revisions are validated to ensure the changes meet cart mask rules before being accepted.

Delete Mask Button

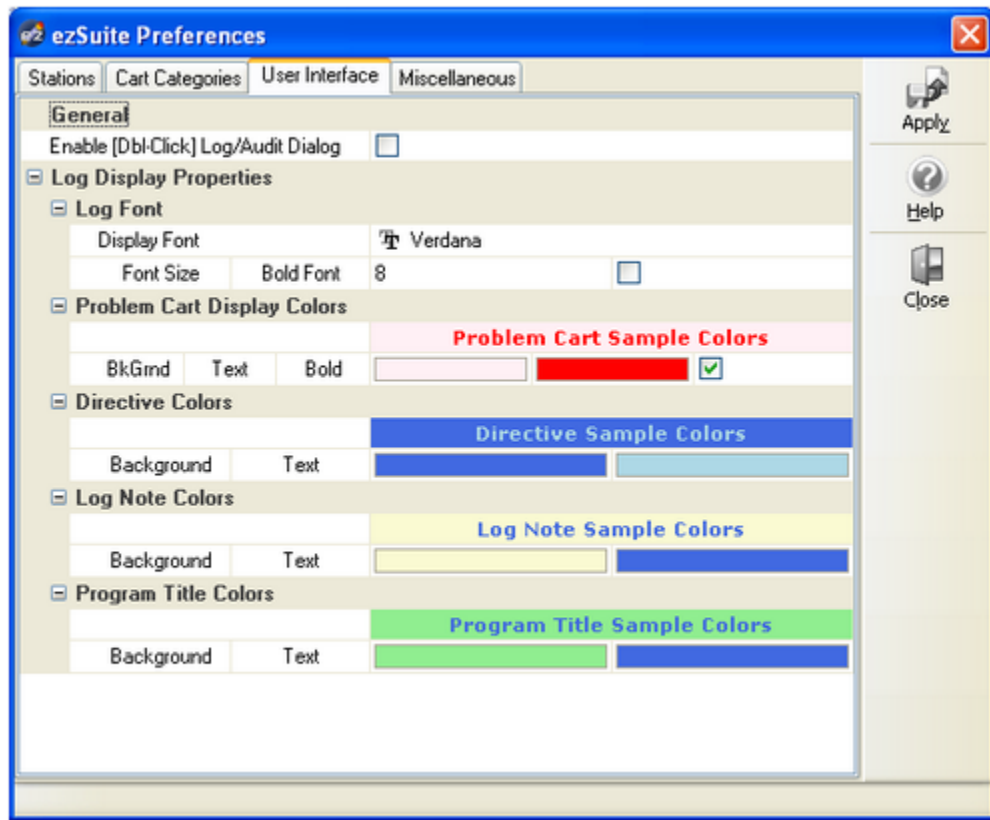
To delete a cart mask in the list, select the item to be deleted and click on the Delete Mask button. The selected cart mask is immediately removed from the list.

Close Cart Mask Edit Panel Button (Done)

Click when finished editing cart masks to close the panel and update the cart mask field contents.

3.3 User Interface

In the User Interface area, you can change settings related to the user interface, including such items as the log editing font and non-audio log item colors.



General Settings

Enable Double-Click on Open Log Dialog. If checked, you can double-click on a calendar date for a log file and the file will be loaded without having to click on the **[OK]** button at the bottom of the dialog. Some users prefer this approach, although it may have the side-effect of inadvertently double-clicking on an unwanted date or a date for which a log file does not exist. For this reason, the feature is optional. The default is not enabled (unchecked).

Log Font Settings

Use this group of settings to control the appearance and size of text on a log. Choose the font name you wish to use from the dropdown list, which also displays a sample of what the font will look like as you scroll through the list. The size of the font may be changed within a range of 8 to 20 points. Checking the **"Bold Font"** checkbox cause all audio items (carts) on the log to be displayed in a bold style.

Log Display Colors

You should try to select colors that will stand out on the log display, yet be easily read. The default display text color is Navy Blue, the default background colors are Aqua for Directives, Yellow for Log Notes, and Lime Green for Program Titles. Problem carts - those that are either missing or out-of-date,

are displayed with the default background color and Red text if the menu item **View | Cart Status Displayed** item is checked. If you want Problem carts to be displayed with bold text, check the **Bold Text** checkbox on the Problem cart panel.

As you change colors the appropriate sample text background and text colors will change to provide an idea of what the log line item will look like.



If you are using an unusual set of color definitions for Windows, for instance, one of the supplied "themes", be careful not to inadvertently make the text "invisible". The sample displays should help avoid that.

Importing and Exporting Font and Color Information

You may have created the perfect color combinations for non-audio log items and want to preserve it for future use or to be able to restore the combination at some later date. ezSuite provides the means to save current settings and restore saved settings on-demand. **[Right-Click]** anywhere on the color combinations page to pop-up the User Interface context menu.



User Interface Settings context menu

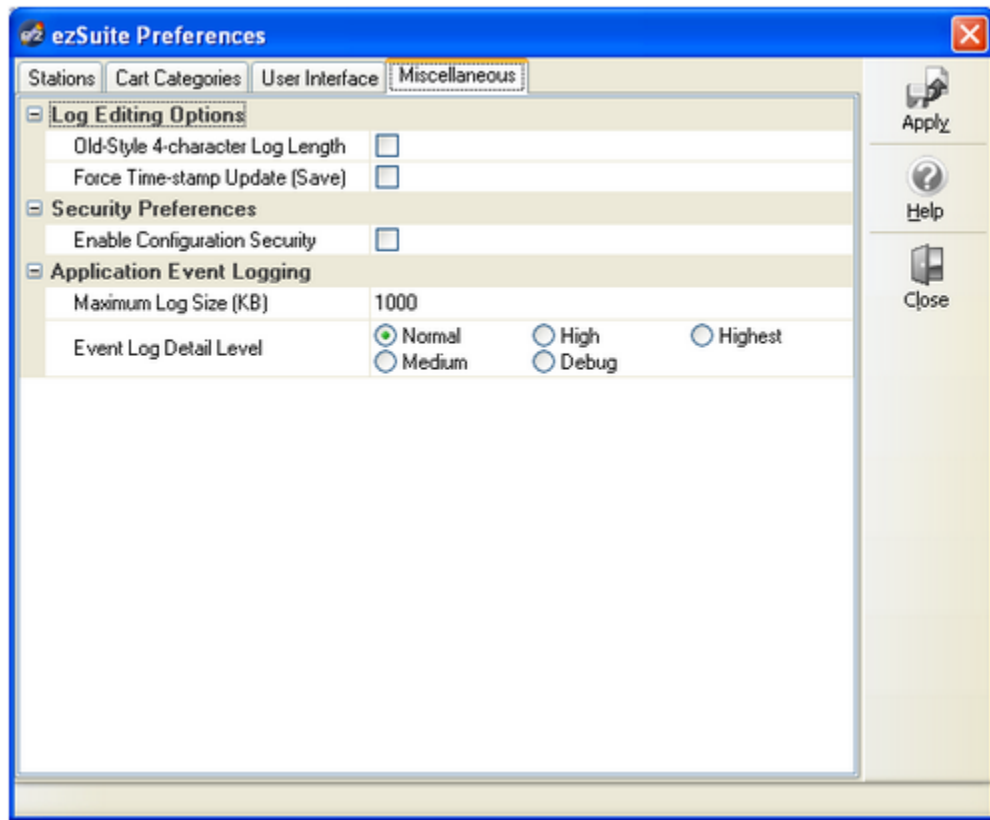
When importing or exporting these settings, you are prompted for a file name. As a default, log settings files have the file extension **.LCF** (for **Log Colors File**).



Sample log color and font files are supplied with the ezSuite installation and placed in the application directory.

3.4 Miscellaneous Settings

The Miscellaneous page of user preferences allows you to configure some miscellaneous features and functionalities of ezSuite.



Log Editing Options

This group of properties applies to ezSuite log editing functionality only.

<u>Property</u>	<u>Description</u>
Old Style 4-character Log Length	Some applications that may use logs edited with ezSuite use an older log structure standard that defines 4-digit audio item (cart) lengths, in the form 'mmss' (minutes, seconds), which limits a logged cart length to 99 minutes, 59 seconds. The latest generic log specification provides for an additional minute value, in the form 'mmmss', which allows for schedule cart lengths of 999 minutes, 59 seconds. If you are using an application that has trouble with the newer standard, check the item Save Logs with Old-Style 4-Character Log Length to work around the issue. When this item is checked, ezSuite will save logs using the older-style 'mmss' logged length format.

Property**Description**

ezSuite reduces the log length field by deleting the 1st minute value in a **mmmss**-formatted log length value. If a cart had a schedule log length in excess of 99 minutes, 59 seconds, the saved log will have an incorrect log length.

Force Time-stamp Update
(Save)

If checked, ezSuite will manually update a log file's time-stamp after saving the file. This option may be needed if the target log folder (directory) is located on a Novell Network server without long file name support enabled.



When ezSuite manually updates a file's time-stamp, it is from the point of view of the PC hosting ezSuite. If the target log folder (directory) is located on another PC that is running with different time zone settings than the PC on which ezSuite is running, you should not enable this option.

Security Preference

You can secure your ezSuite preference settings if you wish. When set, users are unable to open the Preferences dialog and make changes unless they enter a password.

Enabling Security

Click on the **Enable Configuration Security** check box. A password dialog will be displayed, asking you to enter a password. You'll be prompted a second time to confirm the password you've entered. If the password and confirmation password match, security has been enabled. Save your changes by either clicking on the **[Apply]** button or when prompted when you close Preferences.

From this point on, users will have to enter the password you created in order to display the Preferences dialog.



The password is encrypted and cannot be determined by looking in the ezSuite preferences file. If you forget the password, you will be unable to change any of the Preferences.

Disabling Security

Remove the check mark in the **Enable Configuration Security** check box. Save your changes by either clicking on the **[Apply]** button or when prompted on exiting Preferences.

Event Logging Properties

As ezSuite runs, information relating to its performance and problems encountered is written to an application event log. The event log is a text file that is maintained automatically by ezSuite. Event logs are generally used in troubleshooting problems or determining why ezSuite behaved in a certain way. Review the topic on [Extended Event Logging](#) for additional information.

This group of properties provides the means to control the maximum size of the ezSuite event log file, and to adjust the amount of information that is stored to the file as ezSuite runs - the so-called "detail level".

<u>Property</u>	<u>Description</u>
Maximum Log Size (KB)	Use this value to control the maximum size of the ezSuite event log file. ezSuite periodically checks the size and removes old items to ensure the event log stays at or below the defined maximum size. The default value is 1000 KB (1 MB).
Event Log Detail Level	The default detail level is " Normal ". As you change the detail level to Medium, High, Debug, and Highest, ezSuite logs more and more information to the application event log. The higher the detail level, the more information stored in the application event log.

Operation - Using ezSuite

Part

IV

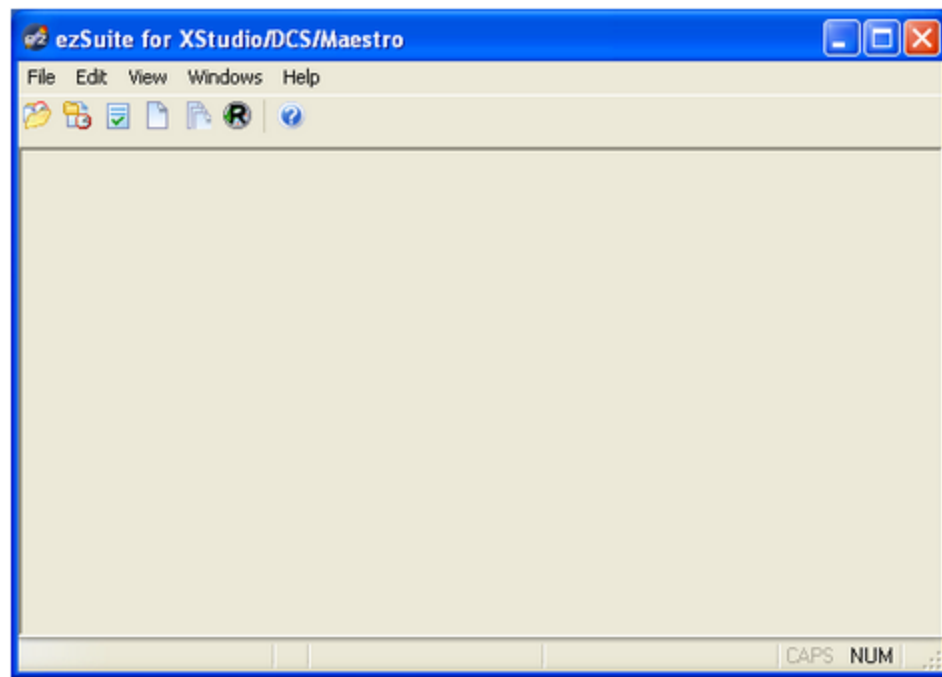
Using ezSuite day-to-day is simple. This section covers the three main areas of functionality: log editing and validation, audit reporting and log reconcile.



Before using ezSuite, be sure you have set up at least one station. See the section in Preferences on [setting up stations](#).

Initial Display

When ezSuite is first started, the display is pretty bland - just a basic blank display with some menu items and buttons. You can have several logs and validation reports open simultaneously, each appearing in its own "window" within the main display area.



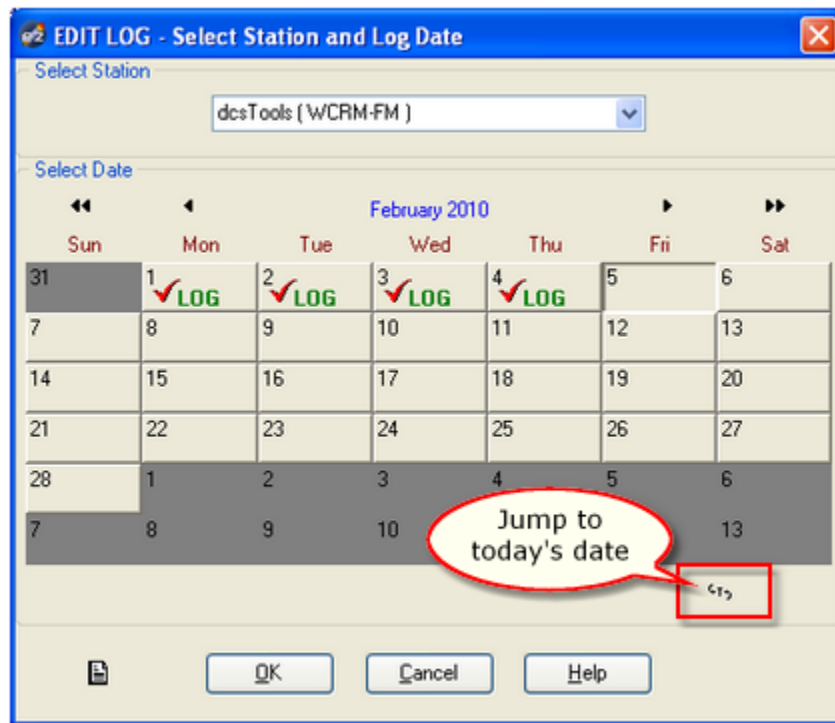
ezSuite initial display (reduced)

4.1 Log Editing & Validation

Basic operation of ezSuite for logs involves opening or creating a log, editing the log by adding, changing or removing items, then saving the log. You can also validate a log - that is, compare the log against an XStudio, DCS, or Maestro inventory to see what items might be missing or have date problems.

4.1.1 Opening a Log

To open a log, select the menu item **File | Open Log**. You can also use the toolbar button for opening a log. You'll be presented with a display of available stations and a calendar from which to choose a log.



The calendar display shows station logs that are available for the calendar dates. A check-mark and the word "LOG" appears on dates where there are logs for the selected station. If you are using Maestro and have made voice-tracking modifications to the log, the word "MOD" will also be displayed on log dates where voice-track modifications have been made.

Select a Station

To select a different station, click on the down-arrow icon in the station list. A list of available stations is displayed from which to choose. Stations are identified and set up in Preferences on the Stations tab. You can also use the **[Alt-DnArrow]** keystroke if the Select Station field is active.

Select a Log Date

To select a log date, **[Left-Click]** on the date you want. If you select a date that has no log and click **[OK]**, you'll be prompted to create a new log, if desired, or cancel the operation.



You can also use a **[Double-Click]** to open a selected log without having to click on the **[OK]** button by enabling this functionality in [Preferences](#).

Navigating the Calendar Display

In addition to mouse control and selection of logs, you can also use the keyboard. As with most Windows applications, use the **[Tab]** to move from control (or button) to control.

Within the calendar control, use the **[LeftArrow]**, **[RightArrow]**, **[UpArrow]** and **[DnArrow]** keys to move among the displayed days.

[PgUp] changes the calendar to the previous month, **[PgDn]** changes the calendar to the next month.

[Ctrl-PgUp] moves to the previous year, **[Ctrl-PgDn]** moves to the next year.



To return to today's date on the calendar, click on the **'GT'** (Go Today) button in the lower right portion of the calendar.

When you have selected the log date for a selected station, click on **[OK]** and the log will be opened. A gauge at the bottom of the main display indicates the progress of opening the file.



Immediately after the log is loaded, it is checked for out-of-sequence times and conflicts like having two items on the log at the same time. If problems are found, they are fixed and a dialog is presented, offering you the opportunity to see what changes were made. You can save the change log if needed for later review. **[Right-Click]** on the changes log display and select the **Save to File** option. You'll be prompted to select a file name. The change log is saved as a standard text file.

4.1.2 Editing a Log

When a log has been selected and opened, the main display will appear similar to the example shown here. There are three main areas in this display: a) hourly audio content totals; b) the log; and c) inventory display. There is a tool bar (similar to the one shown) that provides button access to commonly-used functions. To determine a button's use, float your mouse over it for a hint.

The screenshot shows the ezSuite for XStudio/DCS/Maestro application window. The title bar reads "ezSuite for XStudio/DCS/Maestro - [Log 1 : Wednesday Feb 06, 2013 for XStudio EVO]". The menu bar includes File, Edit, View, Utilities, Windows, and Help. A toolbar with various icons is located below the menu bar. The main display area is divided into three sections:

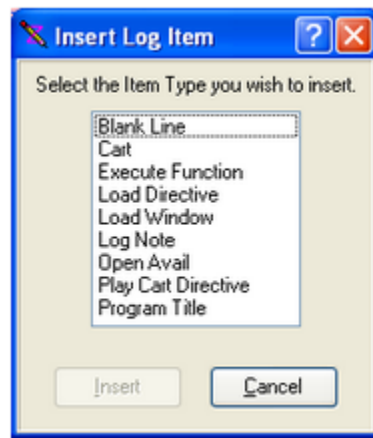
- Hour Totals:** A vertical list on the left showing time intervals from 00:00:59:59 to 23:00:56:43. The current time is 9 am.
- Current Log:** A table titled "Current Log: Wednesday Feb 06, 2013 for XStudio EVO" showing log items with columns: Time, Line Type, Dir Type, Cart Number, Description, Length, Type Code, Relay | Cust#, and Prod Code. The table contains 23 rows of data, including items like "KFKF Jingle - 94FM / UP", "Thinkin' Prob/David Ball", "Voice Track", "Cleopatra - Pam Tillis", "KFKF Jingle-Little Texas", "What Might-Little Texas", "Computer City", "VISA", "KFKF Jingle-10 in a Row", "Chatahochee-Alan Jackson", "Phil. Academy of Nat Sci", "I Still Bel.- Vince Gill", "KFKF Jingle-K C Mornings", "Outbound Pla-Suzy Boggus", "KFKF Jingle - Down", "She Is His -Wynonna Judd", "Voice Track", and "Coca Cola Classic".
- Inventory View:** A table titled "Inventory View" showing a list of items with columns: Cart #, Description, Log Length, Length, Aux Mark, Beg Date, and End Date. The table contains 10 rows of data, including items like "ALABAMA-ROLL ON", "BROOKS,G-THE DANCE", "URBAN,K-SOMEBODY LIKE YO", "RASCAL FLATTS-MAYBERRY", "NGDB-HIGH HORSE", "STEELE,D-TWO PEOPLE IN A", "ORAM,TARA-538 STARS", "DOOBIE BROS-LISTEN TO", and "BASKIN ROBBINS - A".

The status bar at the bottom shows "Log: L:\DCS\020613S1.LOG", "Log: 1,640", "Inventory: 167", and "CAPS NUM".

The log display table is where most of your work will be done. There are a number of basic actions that you will perform, including inserting an item, editing an item and deleting an item.

Inserting a Log Item

Inserting a log item places the new item immediately in front of (ahead of) the current selected log item. To insert an item, touch the [Ins] key. Alternatively, you can [Right-Click] and select the menu item **Add Log Item** or select **Edit | Add Log Item** from the main menu. In all cases, an insert dialog is displayed, allowing you to choose the type of item to insert.



If you are positioned on the last item on the log, you'll be prompted to either insert an item or **append** an item. Appending will place the new item at the end of the log **after** the current, selected item.

Select the type of item you want and either press the **[Enter]** key or click on the **[OK]** button. An edit dialog customized for the particular type of item you're inserting will be displayed. For more information on each of the edit display types, see the section on [Working with Edit Dialogs](#).

Fill in the appropriate fields in the insert dialog and click on **[OK]** to complete the insertion. Your data entry will be validated and you'll be prompted if you have missing information or incorrect information.

Editing a Log Item

To edit, press the **[F3]** key. You can also **[Double-Click]** on the item or select **Edit Log Item** from the main menu or the log's pop-up menu. An edit dialog will appear, customized for the type of item you are editing.

Change the appropriate fields and click on **[OK]** to complete the edit. Your edits will be validated and you'll be prompted if you have missing information or incorrect information.



When editing Log Notes, Blank Lines, Directives and Program Titles, the Log Time of the item must fall between the previous non-spot time and the next non-spot time on the log.

Moving a Log Item

Audio items (carts), can be moved from one location to another on the log by dragging and dropping the item. **[Left-Click]** and hold the mouse button down on an audio item, then move the mouse pointer to the location where you wish to place the item and release the mouse button. The item will be moved from its original location to the new location. If, during the drag process, you drag above the top visible item or bottom visible item on the log, the log will "scroll" in the appropriate direction. Moving the mouse back into the visible items area of the log will stop the scrolling and you can then drop the item to its new location. If you decide not to drop the item, meaning you want to cancel the move, drag the item completely out of the visible items area of the log and release the mouse button. The item will not be moved.



ezSuite allows **ONLY** audio items to be moved. All other non-audio items (program titles, directives, etc.) must either be edited to change the item time or deleted and re-inserted at the appropriate time.

Deleting a Log Item

To delete an item, press the **[Del]** key or select **Delete Log Item** from either the main menu or pop-up menu. You'll be asked to confirm that you really want to delete the item. If you answer "Yes", the item is deleted from the log. Answering "No" cancels the deletion.



Adding, editing, deleting and moving carts around on the log do not affect the original log on hard disk. The changes you've made take effect only when you save the log. If you should get to the point where you do not want to keep your edits and would rather start over, simply open the log from disk again. You'll be asked whether or not to save your changes - in this case, you'd answer "No" and retrieve the original log from disk.

Finding the Next Open Avail

Press the **[F8]** key to jump to the next open avail - the next available position on the log to insert an audio item (cart). Pressing the **[Shift-F8]** keys will jump to the previous open avail.

Jumping to the Next Directive

Press the **[F4]** key to jump to the next directive item on the log. Pressing the **[Shift-F4]** keys will jump to the previous directive.

Searching the Log

Press the **[F11]** key to display a log search dialog. You can search for a cart number or search the description. Once a search has been performed, you can search again by pressing the **[F12]** key. The search again will start from the last successful search position on the log, enabling you to search the entire log by repeatedly pressing the **[F12]** key. The log search features can also be accessed from the Edit menu. The search mechanism will find the search text you've entered anywhere in the cart number or description. For instance, you could search for "john" in the description field and "Elton John", "Rob Johnson" and "John-Boy" will be found. The same is true of searching cart numbers, although if you enter a 4-digit cart number, the match will have to be exact as there are only 4 digits in the cart number. For additional information, see the topic [Searching a Log](#).

Hourly Totals (Jump to Time)

The left side of the main display lists the 24 hours in a log, along with the scheduled audio content length for each hour. If an inventory is used with a given station, the hourly totals will be based on the inventory, using the Aux Mark time of each cart on the log. If a cart does not exist in the inventory, the log length value is used in the total. If no inventory is used, hourly totals are calculated entirely on the log length values of the carts on the log.

The size of the text that displays the hour number and the total for the hour can be increased or decreased for readability by using a pop-up menu. **[Right-Click]** on the Hour Totals list and either increase or decrease the font size of the text.



You can use the "**splitter bar**" between the Hourly Totals list and the log display to widen the list so you can see the entire line of text if you increase the text size.

The hourly totals list also serves as a method of jumping to a particular hour on the log. **[Double-Click]** on any one of the hours to jump to the beginning of the selected hour on the log. Selecting an hour and pressing the **[Enter]** key can also be used to jump to the selected hour.



You can jump to a specific time on the log by pressing the **[F2]** key. You'll be prompted for the time to jump to. See the reference section on [Keyboard Shortcuts](#) for a complete list of keyboard shortcuts you can use.

Inventory

The bottom-right section of the main log editing window is the inventory list, if used. You can sort, filter and place carts from the inventory on the log (using drag and drop operations). For more details, see the section on [Using the Inventory](#).



You can increase or decrease the size of the inventory display (it affects the log display, too) by dragging the "splitter bar" located between the log display and the inventory display. Float your mouse over the display until you see the standard resize cursor, then **[Left-Click]** and drag the splitter up or down to get the size you want. ezSuite "remembers" this setting next time you start the program.

4.1.2.1 Working with Edit Dialogs

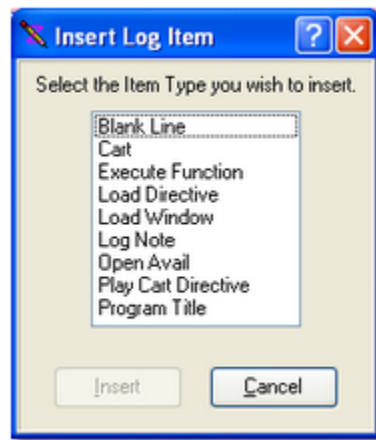
The type of information you need to edit varies with each log record type, and, to make your task easier, there is a customized edit dialog for each. While each record type varies in information, there are some consistent types of information that will be entered. Each of these information types is handled consistently among the edit dialogs. Many of the edit fields help you speed the process by either presenting a list of choices or making it easier to enter information by interpreting what you mean. The first part of this section provides information on various field types and hints on using them effectively. The latter parts include information specific to a particular log record type.



When you are working with a log and wish to edit an item, press the **[F3]** key or **[Double-Click]** on the item to automatically bring up the appropriate edit dialog. See the Reference section for a complete list of [keyboard shortcuts](#) in edit dialogs.

Insert Log Item Dialog

When inserting a new log item, a dialog is displayed providing the means to select the type of log item you wish to insert.



Based on the selected type, a custom dialog specific to the log item type is displayed for data entry.

Navigating Edit Dialogs

You can move through the fields displayed in an edit dialog by pressing the **[Tab]** or **[Enter]** key. Either will advance you to the next field or button in the dialog. **[Shift-Tab]** moves backward through the fields and buttons. Directly select a field for editing using your mouse with **[Left-Click]**.

Most buttons have "accelerator" keys - press and hold the **[Alt]** key, then press the letter that's underlined on the button. This will have the effect of pressing or clicking on the button.

4.1.2.1.1 Functionality Common to All Edit Dialogs

Some log records require a log time entry, some require a program or spot length. Some require a log Type Code or Directive Type. Where possible, entry of this information is made easier with special edit controls.

Time Fields

Time fields require a valid time be entered. The time entry fields in ezSuite allow you to take some short cuts in data entry.

For instance, if you want to enter a time of **"3:00 PM"**, you can simply type **"3p"** and **[Tab]** to the next field. The time will be correctly listed as "3:00 PM".

To enter a time of **"3:15 PM"**, you can type **"3.15p"** or **"15.15"**. Notice that you don't have to use a colon (:) in entry - a period will work just as well. For minute values like **":03"**, you can enter **".3"** (no leading zero required).

Log times are always expressed as hours and minutes with no seconds value, adhering to the requirements of a log for DCS or Maestro.



Times entered without an "AM" or "PM", if entered in 12-hour format, will default to "AM".

Length Fields

Length fields are those used for the length of an audio cart, the duration of a program, and the length of a directive. These are not really clock times, but are expressed as hours, minutes and seconds of

length. The edit dialogs make some assumptions about typical lengths you might enter.

For instance, if you enter "**10**" in a length field, the result will be "**0 hours, 10 minutes, 0 seconds**".

If you enter "**100**", the result will be "**1 hour, 40 minutes, 0 seconds**".

To enter a value of 30 seconds, type "**0.0.30**".

The maximum allowed time for a length field is 16 hours, 39 minutes, 59 seconds, which adheres to the maximum logged length for XStudio, DCS or Maestro.



The log display shows lengths as **mmm:ss** (up to 999 minutes, 59 seconds). These numbers are translated to hours, minutes, seconds in the edit dialog, then translated from standard hours, minutes, seconds to **mmm:ss** on the log display.

Cart Number Fields

Cart numbers are always four (4) characters in length and may include the following characters only: A..Z, 0..9, {, }, !, #, %, ^, @, =, +. Note that the last six (6) of the allowed characters are **macro characters**, which are translated at run-time by the on-air audio delivery system.

Supported Cart Number Macro Characters

Macro Usage

##

Current Voice Number (2-character string)

Whenever these characters are encountered in a cart number, they are replaced by the current global Voice Number value.

Note: You must always use two characters for defining a voice number and always use the ## (pound sign, pound sign) designation when entering the Current Voice Number macro.

%

Current Day of Week (1=Monday .. 7=Sunday)

This character is replaced by the numeric value for the current day of the week.

^

Current Hour (12-hour format)

Hours 1 through 9 = 1..9, 10 = A, 11 = B, 12 = C

Note: Because this is a 12-hour format, the current hour value used when substituting for this macro character can occur twice during the day. For instance the 10 AM and 10 PM hours will return the same value - "A".

@

Nearest Hour (12-hour format)

If current minute of the hour >= 30, then the returned hour value is incremented by 1.

Note: Because this is a 12-hour format, the current hour value used when substituting for this macro character can occur twice during the day. For instance the 10 AM and 10 PM hours will return the same value - "A".

Macro Usage

- =** Current Hour (24-hour format)
- Hours 0 (midnight) through 9 = 0..9, 10 = A, 11 = B, 12 (noon) = C, 13 (1 PM) = D through 23 (11 PM) = N
- Using this macro character format, there are no duplicates throughout the day.
- Note: This character is NOT VALID for use with DCS.**
- +** Nearest Hour (24-hour format)
- If current minute of the hour ≥ 30 , then the returned hour value is incremented by 1.
- Hours 0 (midnight) through 9 = 0..9, 10 = A, 11 = B, 12 (noon) = C, 13 (1 PM) = D through 23 (11 PM) = N
- Using this macro character format, there are no duplicates throughout the day.
- Note: This character is NOT VALID for use with DCS.**

Day of Week Values

The day of week macro character returns a numeric value, based on the current day of the week. Values returned are shown in this table.

<u>Day</u>	<u>Value</u>
Monday	1
Tuesday	2
Wednesday	3
Thursday	4
Friday	5
Saturday	6
Sunday	7

Hour of Day Values

Hour of Day macro characters will return different one-character values, depending on the specific macro character used. The main differences occur between any 12-hour format and any 24-hour format. Values returned by each format type are listed in this table. **Note: 24-hour values are not valid for use with DCS.**

<u>Hour of Day</u>	<u>12-Hour Format</u>	<u>24-Hour Format</u>
Midnight	C	0
1 AM	1	1

<u>Hour of Day</u>	<u>12-Hour Format</u>	<u>24-Hour Format</u>
2 AM	2	2
3 AM	3	3
4 AM	4	4
5 AM	5	5
6 AM	6	6
7 AM	7	7
8 AM	8	8
9 AM	9	9
10 AM	A	A
11 AM	B	B
Noon	C	C
1 PM	1	D
2 PM	2	E
3 PM	3	F
4 PM	4	G
5 PM	5	H
6 PM	6	I
7 PM	7	J
8 PM	8	K
9 PM	9	L
10 PM	A	M
11 PM	B	N

Type Code Fields

Type Code fields use a dropdown list to select type codes. You can also begin typing and the list will show the closest match. The lists are presented as full words to enhance readability. When working with a dropdown list, you can display the list by either clicking on the dropdown button or by using the keystroke **[Alt-DnArrow]**.



Most type code lists are fixed, meaning the user cannot change existing codes or enter new codes. The spot (audio item) Commercial Type is an exception - you can enter codes that do not appear on the list.

Directive Type Fields

Directive Type fields use a dropdown list to select a directive type. Also, typing a directive type will show the closest match. When working with a dropdown list, you can display the list by either clicking

on the dropdown button or by using the keystroke [**Alt-DnArrow**].

Directive selection fields will also place a default value in the Description field. If you are inserting a new Directive on the log and select a "**Time Approximate Load Play**" directive, the Description field will be filled in with "**~ Load Play**". If you select a "**Cast-Off Load Play**" directive, the Description field will be filled in with "**\$ Load Play**".



Automatic insertion of default description text is done **only if the Description field is blank** on opening the dialog. If you are editing a Directive and change the directive type, the default text will not be automatically inserted to replace existing text.

Copy and Paste Text

For fields that contain text, you can copy and paste text using standard Windows keystrokes. Select text and use [**Ctrl-C**] to copy the text to the clipboard, use [**Ctrl-V**] to paste the text from the clipboard into a field. Most fields also support the standard mouse [**Right-Click**] on the field to present menu options to copy, cut, paste and delete field contents.

Confirming or Canceling Edits

Once you have edited a new or existing log item, clicking on the [**OK**] button will confirm the changes. To cancel the edits, click on the [**Cancel**] button. You can also press [**Esc**] or click on the edit dialog's close icon (**X**) to cancel an edit.



When you confirm your changes, the information you've entered is validated. Fields that are required or have special requirements are checked. If there's something wrong with your edits, you'll get a message telling you what's wrong and the edit cursor is placed in the problem field. You will be unable to confirm (save) your changes until all fields that have special requirements are OK. On most dialogs, there are fields that are not required for the log to be valid and workable with XStudio, DCS, or Maestro. These fields can be left blank if desired.

Context Help for Edit Dialogs

Each of the edit dialogs has context help available. To use context help, click on the context help button (**?**) on the title bar, then click on the field for which you need help. You can also touch the [**F1**] key while in a field and get help for that field.

4.1.2.1.2 Blank Line Dialog

ezSuite provides the ability to insert a so-called "blank" line in the log. In reality, the blank line is nothing more than a time place holder. It is generally used as a visual aid in log layout. XStudio, DCS, and Maestro ignore blank lines in general - except in **satellite mode**. When DCS or Maestro is in satellite mode, a blank line on the log that separates a spot record from a directive is not a good thing - the spot will get "orphaned" and not played. The program logic in satellite mode considers a break all contiguous spot items up to the next non-spot record. XStudio does not treat blank lines this way - it simply ignores them.



Be careful in using Blank Line records. Make sure that, if you are running in satellite mode, no spot records get "orphaned" from a directive. This would occur if you placed a blank line record in the middle of a commercial break, creating a situation where you have some audio items or availabilities following the blank line record.

The only field to fill out in a Blank Line record is the time. The time entered must fall between the previous not-spot time and the next non-spot time on the log.

4.1.2.1.3 Spot (Cart) Dialog

It's likely that a majority of your editing will involve adding or editing cart records (a.k.a. spot records). When opened, the display format is similar to the example shown.

You can edit each field individually, or, if using an inventory for the log, simply fill in the cart number and press the **[Enter]** key. If the cart number you entered exists in the inventory, the Description and Length fields will be filled in automatically with the inventory information. You can also select a cart

from the inventory list - click on the **[Show Inv]** button to display the inventory list (see the [expanded spot dialog](#) below) and **[Double-Click]** on the cart you wish to use.

When you have completed editing and press the **[OK]** button, your entries are validated and, if incorrect or missing, you get a warning message and the cursor is placed in the field that needs to be corrected.

Spot (Cart) Dialog Field Information

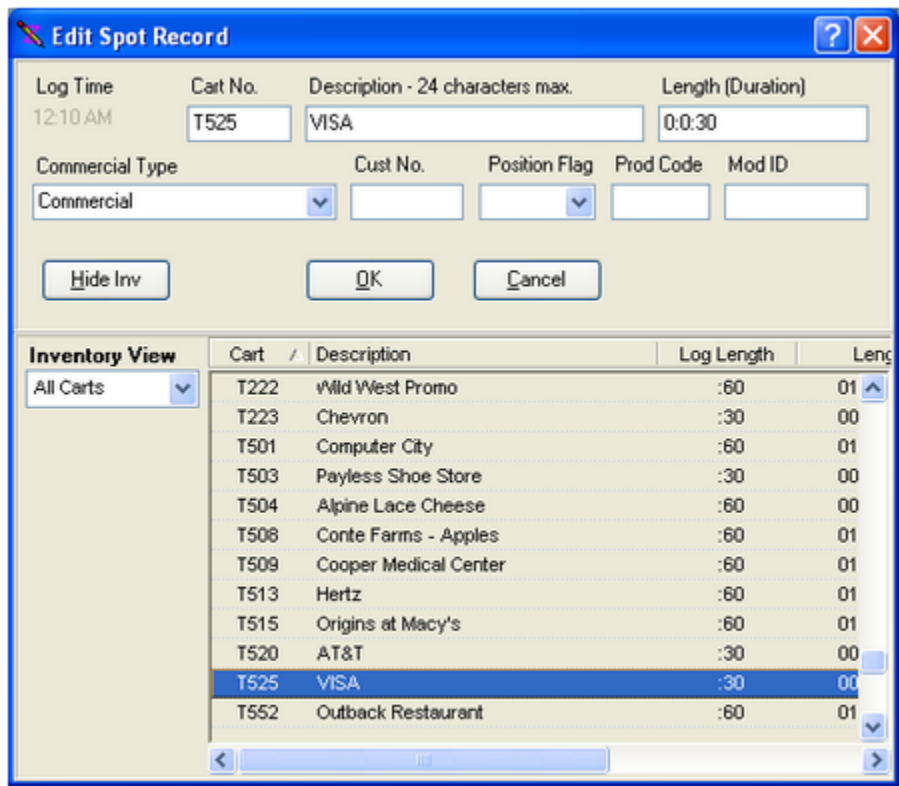
Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed. Items mark **RO** are read-only and not editable.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Log Time	RO	Displays base time for the log item.
Cart Number	✓	The cart number of the log item. This entry can include valid macro characters . When the dialog is closed, the contents of this field are checked to be sure only valid cart number characters have been entered.
Description	✓	The text that will appear on the XStudio, DCS, or Maestro display for this log item.
Length		The length of audio file (cart) as hours, minutes, seconds.
Commercial Type		The Type Code for this item. You can select one of the pre-defined types from the drop-down list or enter up to 4 characters to define your own type code.
 If the item is music cart, this field can be used to enter the song's intro time. The intro time can be entered as a one or two-digit number. The value can be preceded by a colon (:) if desired. XStudio and Maestro support into countdown functionality.		
Customer Number		The customer number. Generally will appear only for items associated with a broadcast spot order and identifies the traffic system customer number associated with the cart.
Position Flag		Sets anchor position of the item in a cluster. Default is blank - the field is empty.
Product Code		The item product code. Generally will appear only on logs that have items on them that were exported from a commercial traffic system.
Mod ID	RO	If a log has been voice-tracked with Maestro and the item is a part of a modified sequence, a number will appear in this field.



To create an "open" or "blank" avail, enter a cart number of "*****" (4 asterisks) and leave all other fields blank. You can create an open avail more easily by selecting the item [Open Avail](#) from the Insert Log Item dialog.

You can expand the spot dialog display to show the inventory (if enabled) and select carts (spots) from the inventory list. For more information on using the inventory, see the section on [Using the Inventory](#).



Edit Spot Record

Log Time: 12:10 AM Cart No.: T525 Description - 24 characters max.: VISA Length (Duration): 0:0:30

Commercial Type: Commercial Cust No.: Position Flag: Prod Code: Mod ID:

Buttons: Hide Inv, OK, Cancel

Inventory View

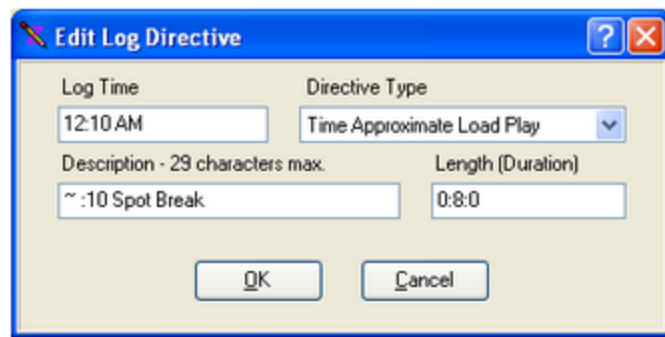
All Carts

Cart	Description	Log Length	Length
T222	Wild West Promo	:60	01
T223	Chevron	:30	00
T501	Computer City	:60	01
T503	Payless Shoe Store	:30	00
T504	Alpine Lace Cheese	:60	00
T508	Conte Farms - Apples	:60	01
T509	Cooper Medical Center	:60	01
T513	Hertz	:60	01
T515	Origins at Macy's	:60	01
T520	AT&T	:30	00
T525	VISA	:30	00
T552	Outback Restaurant	:60	01

When the inventory list is displayed, you can **[Double-Click]** on an inventory item to fill in all applicable fields in the spot record. You can also drag an item from the inventory list and drop it on the edit panel to fill in all applicable fields.

4.1.2.1.4 Load Directive Dialog

Load directives are key components to satellite or full local automation in XStudio, DCS, and Maestro. It is important that you understand the use and meaning of directives. If you have questions about the proper use of directives, or need details on the specifics of using a particular directive, consult your XStudio, DCS, or Maestro documentation. The Load Directive Dialog supports all documented directive types for XStudio, DCS, and Maestro.



Edit Log Directive

Log Time: 12:10 AM Directive Type: Time Approximate Load Play

Description - 29 characters max.: ~:10 Spot Break Length (Duration): 0:8:0

Buttons: OK, Cancel

When you have completed editing and press the **[OK]** button, your entries are validated and, if incorrect or missing, you get a warning message and the cursor is placed in the field that needs to be corrected.

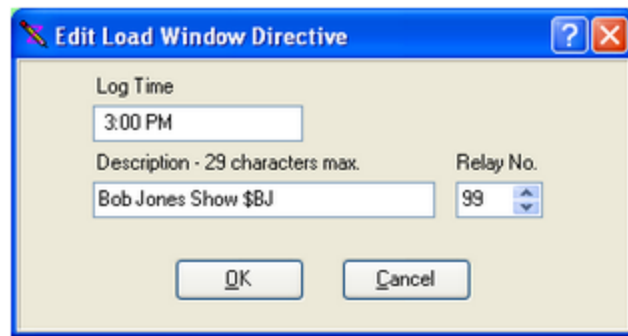
Load Directive Dialog Field Information

Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Log Time	✓	Execution time for the directive. The time entered must fall between the previous not-spot time and the next non-spot time on the log.
Directive Type	✓	The type of directive for this log item. Select the directive type from the drop-down list. See your XStudio, DCS, or Maestro documentation for details on directive types and their usage.
Description	✓	The text that will appear on the XStudio, DCS, or Maestro display for this log item.
Length		The execution length of the directive, as hours, minutes, seconds.

4.1.2.1.5 Load Window/Execute Function Dialog

This dialog is displayed when you select either a Load Window directive or an Execute Function directive. The information required for each of these directives is essentially the same. The key value is the Relay Number, which identifies which function or action to execute by number. The difference for the Load Window directive is that it requires special text in the Description field. If you are unfamiliar with the requirements of Load Windows directives, see your XStudio, DCS, or Maestro documentation for details.



When you have completed editing and press the **[OK]** button, your entries are validated and, if incorrect or missing, you get a warning message and the cursor is placed in the field that needs to be corrected.

Load Window / Execute Function Field Information

Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Log Time	✓	Execution time for the directive. The time entered must fall between the previous not-spot time and the next non-spot time on the log.
Description	✓	The text that will appear on the DCS, Maestro or XStudio display for

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Relay Number	✓	The Action ID number from your XStudio automation setup or the internal relay number of the function or window from your DCS or Maestro configuration. Valid relay numbers are 1-9999.



DCS supports relay numbers **1..99** ONLY. If you are editing a log for DCS, make sure you enter values only within this range.

4.1.2.1.6 Log Note Dialog

Log Notes are informational in nature and, in XStudio and DCS, are ignored. In Maestro, they can be used to enter references to text (live commercial copy, promo copy, weather, etc.). See your Maestro documentation for details on using Log Notes for text references.



If you are running in **satellite mode** on a DCS or Maestro unit, make sure that the placement of Log Notes does not "orphan" carts that need to be played. Place Log Notes in areas of the log that will not split up a sequence of carts that is supposed to play in sequence.

When you have completed editing and press the **[OK]** button, your entries are validated and, if incorrect or missing, you get a warning message and the cursor is placed in the field that needs to be corrected.

Log Note Field Information

Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Log Time	✓	The time at which the note appears on the log. The time entered must fall between the previous not-spot time and the next non-spot time on the log.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Description	✓	The informational text that will appear on the log display for this item.

4.1.2.1.7 Open Avail Insert

An "Open Avail" is simply a spot record with asterisks (****) as the cart number. If you choose to insert an Open Avail in the log from the insert item list, no dialog is presented as there's no information for you to edit. An open avail on the log appears as a standard spot (cart) record with the 4 asterisks as the cart number.

To edit an Open Avail, [**Double-Click**] on the item or press the [**F3**] key and the standard Spot Dialog will be presented. You can search the for open avails using the [**F8**] and [**Shift-F8**] keystrokes. See the Reference section on [keyboard shortcuts](#) for a list of available shortcuts when working with a log.

4.1.2.1.8 Play Cart Dialog

The Play Cart Directive Dialog is very similar to the Spot Dialog in appearance and functionality, with the exception that the Play Cart Directive needs a valid log time. You can use the same editing techniques for this dialog as you do with the [Spot Dialog](#).

When you have completed editing and press the [**OK**] button, your entries are validated and, if incorrect or missing, you get a warning message and the cursor is placed in the field that needs to be corrected.

As with the Spot Dialog, you can expand the Play Cart Directive Dialog to display the cart inventory. See the [expanded spot dialog](#) for an example of its appearance.

Play Cart Dialog Field Information

Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Log Time	✓	Displays execution time for the directive. The time entered must fall between the previous not-spot time and the next non-spot time on the log.
Cart Number	✓	The cart number of the log item. This entry can include valid macro characters . When the dialog is closed, the contents of this field are checked to be sure only valid cart number characters have been

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
		entered.
Description	✓	The text that will appear on the DCS, Maestro or XStudio display for this log item.
Length		The length of audio file (cart) as hours, minutes, seconds.
Commercial Type		The Type Code for this item. You can select one of the pre-defined types from the drop-down list or enter up to 4 characters to define your own type code.
Customer Number		The customer number. Generally will appear only for items associated with a broadcast spot order and identifies the traffic system customer number associated with the cart.
Position Flag		Sets anchor position of the item in a cluster. Default is blank - the field is empty.
Product Code		The item product code. Generally will appear only on logs that have items on them that were exported from a commercial traffic system.

4.1.2.1.9 Program Title Dialog

Program Titles are used primarily to communicate, via the log, program elements to an operator of DCS, Maestro or XStudio. Usage of Program Titles is most common for live-assist hours of the broadcast day.

When you have completed editing and press the [OK] button, your entries are validated and, if incorrect or missing, you get a warning message and the cursor is placed in the field that needs to be corrected.

Program Title Field Information

Items with a check mark in the **REQ** column require user entry, while unchecked items have default values which can optionally be changed.

<u>Field</u>	<u>REQ</u>	<u>Usage</u>
Log Time	✓	Start time for the program. The time entered must fall between the previous not-spot time and the next non-spot time on the log.
Description	✓	The text that will appear on the XStudio, DCS, or Maestro display for

<u>Field</u>	<u>REQ</u> <u>Usage</u>
	this log item.
Length	The execution length of the program, as hours, minutes, seconds.
Type Code	The Program Type Code for this item. You can select one of the pre-defined types from the drop-down list or enter up to 4 characters to define your own type code. Manually entered type codes can exceed 4 characters, but only the first four characters are saved to the log.

4.1.3 Saving a Log

Save a log by selecting **File | Save Log**. You can also use the toolbar button for saving a log. If the log already exists in the save location, you'll be prompted and offered the opportunity to either overwrite the existing log or cancel the save operation.

A check will be made, prior to saving, to see if the log file might have been changed by someone else while you were editing. If so, a prompt will appear advising you that the log on disk has changed from when you opened it. You can either continue with the save or cancel saving.



You can also "**Save a Log As..**" When this menu item is selected, a save log dialog appears, similar to the display you see when opening a log. You can even select an entirely different station and save the log!

A log can also be saved as a template or as an XStudio Emergency Log. See the topics on [Log Templates](#) and [Emergency Logs](#) for more information.

4.1.4 Changing Log Appearance

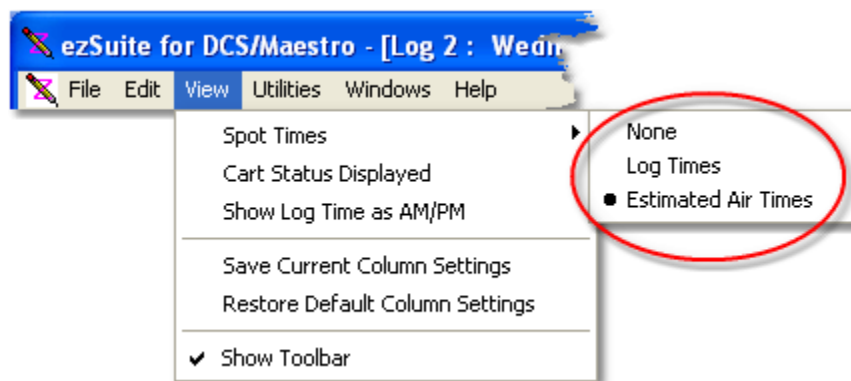
You can change certain aspects of how log items are displayed from the **View** menu. ezSuite offers multiple ways to display cart (audio item) times, and provides the means to highlight carts (audio items) that are either not valid for the log date or missing from the audio inventory. In addition, the text and background color of all log items can be controlled, as can the [log font style and size](#).



Settings modified from the **View** menu take effect immediately when changed and are "remembered" by ezSuite, so the next time you launch the program, your settings are restored.

Display Spot Times

You can choose how to display spot times - the default is not to display them at all - by selecting the menu item **View | Spot Times** and then selecting how you want the spot times displayed, as shown.



Select the option "**Log Times**" to display the spot (audio item) times in the traditional format that DCS and Maestro log editors use, with each item incrementing one second from the previous item.

Select the option "**Estimated Air Times**" to display spot (audio item) times as an estimate of when the item would be played in a given hour. The estimated play time is hour-based, meaning that the first item in a given hour is estimated to play at the straight-up of the hour and each subsequent item is

offset by the previous items' play length, either based on the log's Length field or, if used, the audio inventory's Aux Mark for the cart. This option is useful for stations running local automation.

To suppress the display of log times for audio items, select the option **"None"**.

Hour Totals

00 - 00:59:59
01 - 01:01:41
 02 - 00:57:13
 03 - 00:58:09
 04 - 00:57:28
 05 - 00:58:11
 06 - 00:57:13
 07 - 00:58:33
 08 - 00:58:58
 09 - 00:58:11
 10 - 00:57:07
 11 - 00:55:44
 12 - 00:56:31
 13 - 00:55:41
 14 - 00:56:31
 15 - 00:55:41
 16 - 00:59:38
 17 - 00:55:47
 18 - 00:56:43
 19 - 00:55:41
 20 - 00:56:31
 21 - 00:55:41
 22 - 00:56:31
 23 - 00:56:43

Current Log: Wednesday Feb 06, 2013 for XStudio EVO

Time	Line Type	Dir Type	Cart Number	Description	Length	Type Code	Relay Cust#	Prod Code
09:04:10			J102	KFKF Jingle - 94FM / UP	000:03	CM		
09:04:13			M59C	Thinkin' Prob/David Ball	000:48	CM		
09:05:01			V001	Voice Track	000:12	E		
09:05:13			M50A	Cleopatra - Pam Tillis	001:22	CM		
09:06:35			J104	KFKF Jingle-Little Texas	000:03	CM		
09:06:38			M50H	What Might-Little Texas	002:47	112		
09:10	D	LP		9:10 Spot Break	000:00	00:00:50		
09:09:25			T501	Computer City	000:59	CM		
09:10:24			T525	VISA	000:30	CM		
09:10:54			J100	KFKF Jingle-10 in a Row	000:12	CM		
09:11:06			M57I	Chatahochee-Alan Jackson	001:08	15		
09:12:14			PS01	Phil. Academy of Nat Sci	000:60	CM		
09:13:14			M34R	I Still Bel.- Vince Gill	001:42	15		
09:14:56			J103	KFKF Jingle-K C Mornings	000:07	CM		
09:15:03			M32I	Outbound Pla-Suzy Boggus	001:04	08		
09:16:07			J101	KFKF Jingle - Down	000:04	CM		
09:16:11			M32R	She Is His -Wynonna Judd	002:09	15		
09:18:20			V002	Voice Track	000:03	E		
09:20	D	LP		9:20 Spot Break	000:00	00:00:49		
09:18:23			T100	Coca Cola Classic	001:00	CM		

Inventory View

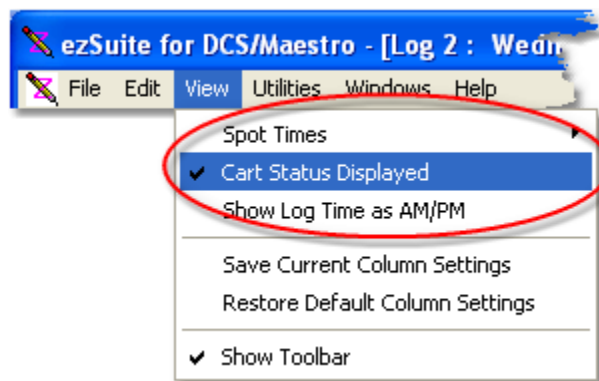
Cart	Description	Log Length	Length	Aux Mark	Beg Date	End Date
0005	ALABAMA-ROLL ON	3:59	03:58:60	03:56:44	12/19/1997	12/31/2037
0030	BROOKS,G-THE DANCE	3:22	03:34:28	03:24:87	10/26/1999	12/31/2036
1961	URBAN,K-SOMEBODY LIKE YO	:00	03:50:51	03:42:94	06/26/2002	12/31/2036
2094	RASCAL FLATTS-MAYBERRY	:00	03:59:34	03:48:73	01/08/2004	12/31/2036
2387	NGDB-HIGH HORSE	3:01	03:04:68	03:01:88	04/14/2000	12/31/2037
2801	STEELE,D-TWO PEOPLE IN A	:00	03:57:60	03:47:27	01/18/2008	12/31/2036
2895	ORAM,TARA-538 STARS	:00	03:40:29	03:31:40	11/05/2008	12/31/2036
7229	DOOBIE BROS-LISTEN TO	:00	03:40:10	03:35:27	09/19/2004	09/19/2034
9999	BASKIN ROBBINS - A	:30	00:00:00	00:00:00	04/05/2004	08/31/2004

Log: L:\DCS\020613S1.LOG Log: 1,640 Inventory: 167 CAPS NUM

Estimated Air Times Displayed

Highlight Problem Carts

You can display "problem carts" in a different color scheme (the default is not to display "problem cart" information) if desired. Select the menu item **View | Cart Status Displayed** to toggle problem cart highlighting on and off.



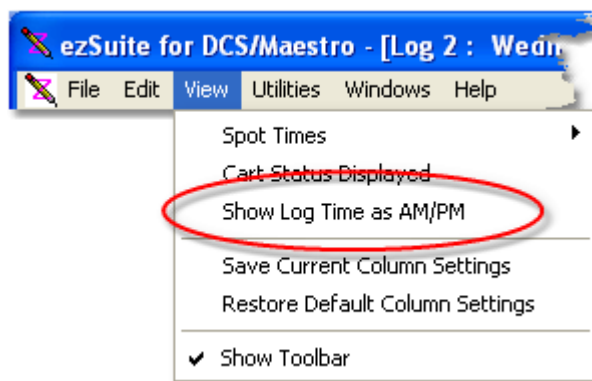
See the topic on [Log Colors](#) for more information on setting the specific colors and properties of audio items that are either out-of-date for the log date or missing from the audio inventory.



If you are working with a template or an XStudio emergency log, only missing carts are marked when Cart Status Display is enabled. Since templates and emergency logs are considered "undated", checking of valid carts dates is not done for these types of logs.

Show Log Times as AM/PM

You can change the time display of log items from military time (the default) to AM/PM times. Select the menu item **View | Show Log Time as AM/PM** to toggle log item times between military and AM/PM display.



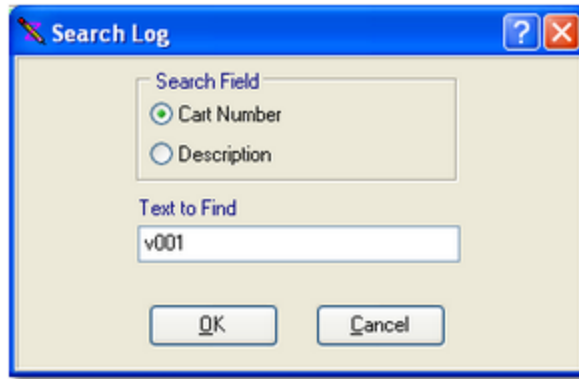
Changing how log item times are displayed does not affect the underlying log data, which will be saved in military time format. Displaying times as AM/PM time is for user convenience.

Cart Category Colorization

You can use the background and text colors associated with Cart Filters (Cart Categories) to make it easier to quickly identify different audio item groups on the log. The example log shown above uses different color schemes for commercials, jingles, music, and voice tracks to make them readily identifiable at a glance. See the topic on [Cart Categories](#) for more information on defining colors associated with various groups of audio items.

4.1.5 Searching a Log

You can search a log for either cart numbers or descriptions on the log. To perform a search, select the main display's **Edit | Find** menu item or press the **[F11]** key. A dialog similar to the one shown below will be displayed. To repeat your last search, select the main display's **Edit | Find Again** menu item or press the **[F12]** key.



Searches are case-insensitive and will find your entered search text anywhere in the selected search field.



The search mechanism will find the search text you've entered anywhere in the cart number or description. For instance, you could search for "john" in the description field and "Elton John", "Rob Johnson" and "John-Boy" will be found. The same is true of searching cart numbers, although if you enter a 4-digit cart number, the match will have to be exact as there are only 4 digits in the cart number.

If a search is unsuccessful, a warning sound will be issued and the main display's status bar will display a message indicating the search text was not found.

ezSuite saves the search field and text to find when you exit the program and restores those values the next time the program is started.

4.1.6 Copy and Paste Commercials

You can copy a spot (commercial) record on the log to a special "spot clipboard" and then subsequently paste it (insert another copy of the spot) into the log.



ONLY spot records (carts) can be copied and pasted. Log items other than audio (spot) records require manual insertion.

To copy a spot record, select the spot on the log you wish to copy. Then, you can use the **[Ctrl-F3]** keystroke to copy the item to the spot clipboard. You can also use menu items from the main Edit menu or the log display's pop-up menu.

To paste a copied spot record, select the row on the log where you want the spot inserted. Press **[Ctrl-Ins]** to insert the spot. The record will be inserted immediately above the selected row. You can also use the main Edit menu or log display pop-up menu to paste from the spot clipboard.

Copy and Paste is active only when the log table is the active control on the main display. Copy and

paste can also be used across logs. For instance, you may have today's log open in a window, copy a spot record, then switch to another log window (say, tomorrow's log) and paste the spot into that log.



See the Reference section on [Keyboard Shortcuts](#) for a complete list of keyboard shortcuts you can use.

4.1.7 Using the Inventory

If you have selected an inventory for a station, the inventory information is loaded and displayed on the main display each time you open a log. The inventory information can be sorted and/or filtered for ease of use. The same type of display is also used for cart selection when adding or editing a spot record or adding or editing a play cart directive. The inventory display will look similar to the following:

Inventory View		Cart / Description	Log Length	Length	Aux Mark	Beg Date	End Date
User Filters	▼	T223 Chevron	:30	00:30.41	00:29.61	06/19/1993	12/31/2037
Cart Filters		T501 Computer City	:60	01:00.88	00:58.80	10/08/1994	12/31/2037
Commercials	▼	T503 Payless Shoe Store	:30	00:30.46	00:30.46	10/08/1994	12/31/2037
		T504 Alpine Lace Cheese	:60	00:58.80	00:58.41	10/08/1994	12/31/2037
		T508 Conte Farms - Apples	:60	01:02.92	01:01.86	10/08/1994	12/31/2037
		T509 Cooper Medical Center	:60	01:01.26	01:00.40	10/08/1994	12/31/2037

Expired carts, those that are invalid for today's date, are displayed in **red** and future-dated carts, those that are valid from some date range beyond today, are displayed in **green**.

Selecting Carts from the Inventory

You can use the inventory to insert carts on the log (on the main display) and to select carts when adding or editing a spot record or play cart directive. The selection process is slightly different, depending on whether you are working on the main display with a log or editing a single cart item in one of the pop-up dialogs.

Main Display - Inserting a Cart from the Inventory into the Log

On the main display, you can select a cart from the inventory and place it on the log. [**Left-Click**] on the cart, hold the mouse button down and drag the cart to the position on the log where you want to insert the cart. Then, drop it on the log. If the cart is invalid for the selected log date, you'll be prompted and offered the opportunity to cancel adding the cart to the log.

Selecting a Cart in an Edit Dialog

To select a cart in one of the edit dialogs, [**Double-Click**] on the cart you wish to select, or, if you prefer using the keyboard, highlight the cart and press the [**Enter**] key. In either case, the cart number, description and length of the cart will be placed in the edit fields. You can also drag a cart from the inventory and drop it on the record display, similar to the main display drag and drop operation.

Filtering Carts

The left portion of the display is for "filtering" the inventory list. There are predefined filters for all carts, expired carts and future-dated carts. Additionally, you can create your own filters in Preferences. The use of cart filters reduces the size of the list to only those items you wish to see. You can change the filter or, if you have the User Filters view selected, change the Cart Filter at any time.

Sorting Carts

You can sort the inventory by clicking on the column header on which you wish to sort. Most, but not all, columns can be used for sorting. Clicking once on the column sorts in ascending order on the column; clicking again reverses the sort to descending order.



The following items are available on the main log edit display only! None of the log record edit dialogs that include an inventory list have these options available.

The ezSuite Inventory Pop-Up Menu

The ezSuite inventory pop-up menu provides some options related to the inventory display. To access the menu, **[Right-Click]** on the displayed inventory list.



Available options include manually loading a different inventory (you are prompted to select the inventory file) and printing the inventory list.

Load Inventory

This menu option allows you to load and display an inventory file of your choosing. You are prompted to select a file name.

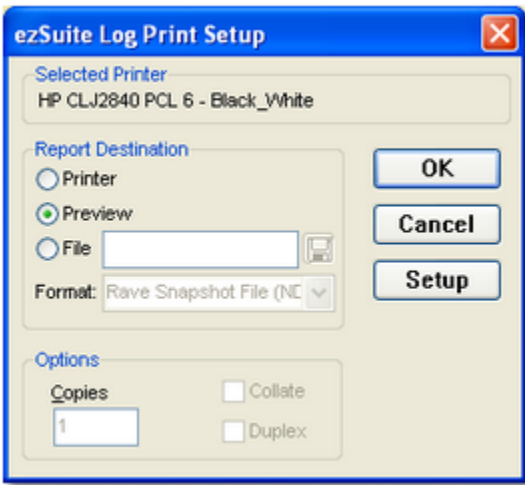
Printing a Cart List

You can print a list of carts at any time. **[Right-Click]** on the inventory display and select the menu item **Print Inventory** from the pop-up menu. You're offered the chance to select a printer, preview the printed list, print the list or cancel printing. The printed list will be as the inventory is displayed on-screen - that is, the printed list reflects the current filter and current sorting of the inventory.

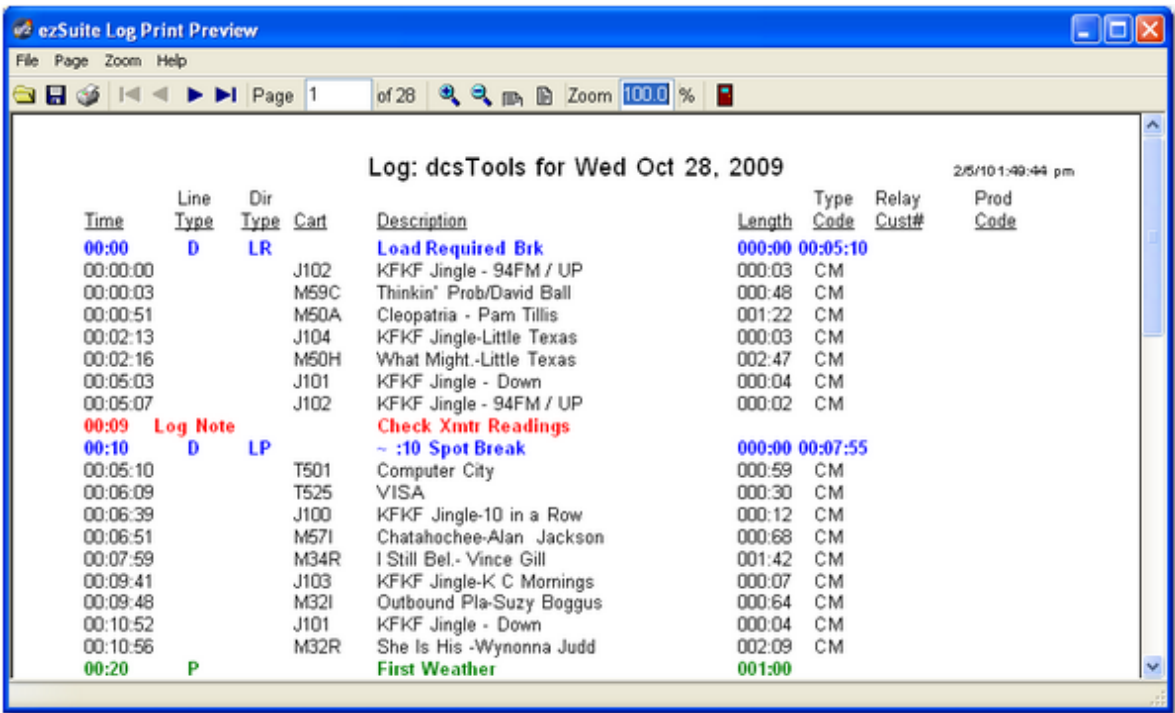
4.1.8 Printing Logs

You can print an opened log at any time. Access the print log feature by selecting the menu item **File | Print Log**, by clicking on the **[Print Log]** toolbar button, or by right-clicking your mouse over the log display and selecting the **Print Log** item.

Initially, you'll see a dialog that allows you to choose whether to preview the printed log on-screen, print directly to a printer, or save the printed output to a file. The **[Setup]** button allows you to choose the printer and change various printer settings.



If you select the **Preview** option (the default), the printed log will be generated and displayed in a preview window similar to the one shown below.



In the preview window, you can page through the log on-screen by using the forward and back toolbar buttons. You can zoom the preview in and out using the magnifying glass buttons on the toolbar. Scroll the page with the scroll bar to see the lower portions of the page. You can also scroll the page using the [PgUp] and [PgDn] keys and the [UpArrow] and [DnArrow] keys.

Send the log to a printer from the preview by clicking on the printer button on the toolbar. A print dialog will be displayed that allows you to change the printer, if desired, and to select a range of pages to print, if desired.



You can choose to print only the page or pages you wish from the print button in the preview display.

If you elect to print the log directly without previewing, it will be generated and sent directly to the selected printer.



The print routines will fail if the PC you are using has no printers defined or if the default printer is unavailable. See the section in the Troubleshooting topic on [specific errors](#) for error messages and solutions.

4.1.9 Log Templates

A log template is a building block for creating logs. A template defines a group of air-play events in a specific sequence for a specific block of time. Templates can be up to twenty-four (24) hours in length, but are generally much shorter and used to define blocks of program sequences that are repeated throughout a day or that occur only occasionally. You can create special, non-repeating templates that might only be used during a holiday, for instance.

Common template examples are 1-hour standard programming blocks, a 4-hour "morning drive" template, and a "Christmas" template that covers an entire day and is comprised of program events completely different from the normal day-to-day programming.

Each template is assigned a name of your choosing, typically something that identifies the station and purpose of the template. ezSuite does not limit the number of templates you can create and template names can be as long as the host operating system supports. All template files on disk have the extension **.FMT** as a default.

Creating a Template

You can create log templates from scratch or save an existing log as a template and edit to make it generic in nature.

Create a Template from Scratch

To create a new template from scratch, select the menu item **File | New Log** from the main menu. The standard open log dialog is presented. Select any station you wish and any date that does not already have a log - we'll be negating the station and date information once we've created the template. A new log window is displayed and initially has no log items whatsoever.

Proceed with adding items to the log - program titles, directives, log notes, etc. See the section on [inserting new log items](#) for details on the insertion process.

When creating a template, one of the major differences is a template will generally not have any specific audio cart items, rather, it will have open availabilities where, when the template is used as a part of a log, the specific cart numbers for that log date are placed. For more information on inserting open avails, see the topic [Open Avail Insert](#).

For ease in using templates, it is recommend that you use midnight as the starting time for the template. When using and/or inserting templates into a log, the times will likely change anyway, as the template might be inserted at, say, 1:00 PM. ezSuite automatically calculates the starting time on the log where the template is being inserted based on the time at the insertion point.



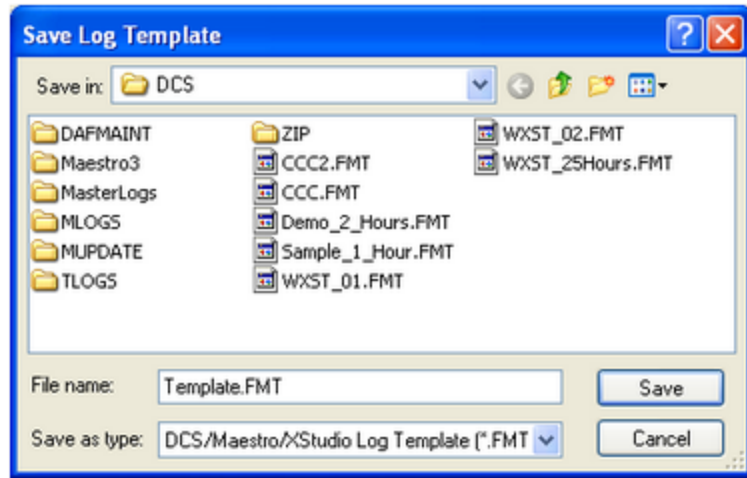
To make the process smoother when repeatedly inserting a template into a log - for instance, a single-hour template repeated several times - it is recommended that you construct the template so the last time on the template works out to fill the entire block of time you intended with the template.

As an example, if you are creating a one-hour template and the last item on the template is a directive at 00:45 of the hour, add a Blank Line record at 00:59. Then, if you insert the template a second time at the end of the 1st template schedule, the 1st time of the insertion will be exactly the top of the next hour and all subsequent times will be positioned properly during that hour.

Create a Template from an Existing Log

Creating a template from an existing log is as simple as selecting the menu item **File | Log Templates | Save as Log Template**. A dialog appears, prompting for the folder location and name of the

template. As a default, templates are stored in the same folder as logs are placed.



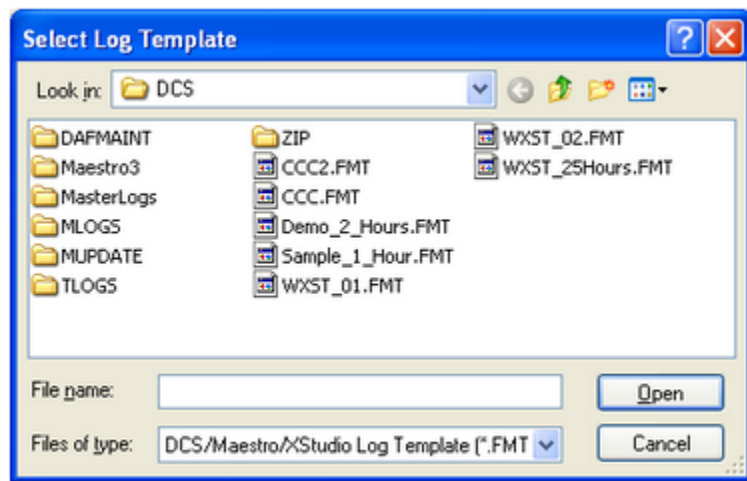
Once the log has been saved as a template, you can edit the log to remove any specific cart number references or make them open avails, as desired.

Editing a Template

To edit an existing template in a new edit window, select the main menu item **File | Open Log Template**.

To edit an existing template in the current log edit window, select the menu item **File | Log Templates | Open a Log Template**.

In either case, a dialog is displayed for selection of the log template.



Once the template is open, edit the content as normal. Refer to the topic [Editing a Log](#) for general log editing information and links to specific edit dialogs.

Saving a Template

To save a template that you have edited, use the standard menu item **File | Save Log** or the [Save

Log] button on the toolbar. As with normal logs, you will be prompted to confirm overwriting the original template on disk.

Cloning a Template

Sometimes, it is desirable to use an existing template to create another one based on the original. To "clone" or copy a template, open the template you wish to use as the basis for cloning. When the template is open, select the menu item **File | Log Templates | Save as Log Template**. You will be prompted for a new template name. Enter the name and click on the **[Save]** button.

Using Templates

Log templates can be inserted into an existing log or into a new, empty log.

If the target log is a new, empty log, select the menu item **File | Log Templates | Insert Log Template**. You will be prompted to select a template and the template will be inserted into the empty log.

If the target log is an existing log, the process is the same, but you must select an "insertion point" on the log **before** using the menu to insert the template. In other words, select a log record, then insert the template. The template will be inserted starting immediately prior to the selected log record, unless the selected record is the **last** record on the log; in that case, you're prompted with the option to append (place the template after the selected record) or insert (place the template ahead of the selected record).

When a template is inserted, the original log times on the template are modified to offset from the log time at the insertion point on the target log. For instance, if you select a log record at 04:00 AM, the log record prior to the selected record has a log time of 02:59 AM, and insert a 1-hour template ahead of it, the template times will range from 03:00 AM to 03:59 AM, filling the entire 3:00 AM hour.

ezSuite always places the starting template time at the previous log time plus one minute when inserting a template. If there are time overlaps because the inserted template duration is greater than the time window in which it is being inserted, ezSuite attempts to adjust times following the template content accordingly.

If inserting a template causes the log to run more than 24 hours, you are prompted as to whether or not to discard log entries that run beyond 11:59:59 PM. If you do not discard the log entries that occur beyond 11:59:59 PM, you will need to edit the times of those items to get them into the log day.



ezSuite will allow you to save a log that has entries beyond 11:59:59 PM that occur as the result of inserting a template. However, the next time you open the log, the automatic time fix-up feature will attempt to move those items' time to a valid time before 11:59:59 PM.

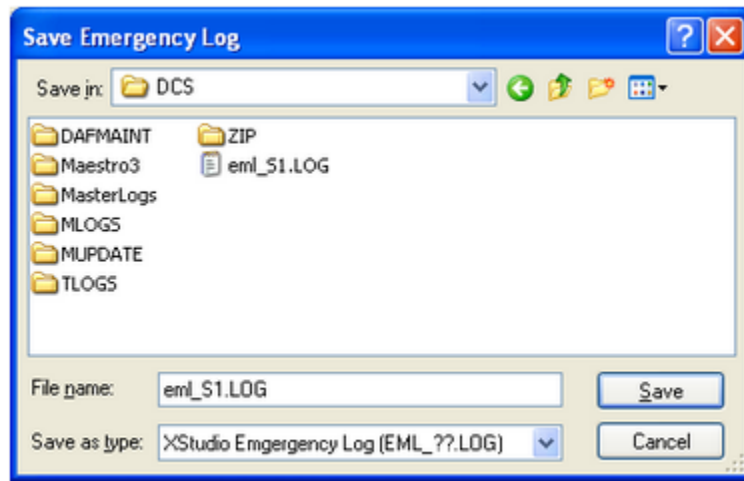
If a log has items beyond 11:59:59 PM and is loaded by an on-air delivery system without being corrected, results are unpredictable. In most cases, these "overrun" items will simply be discarded by the audio system.

4.1.10 Emergency Logs

An emergency log is nothing more than an undated standard log with a special name, located in the same folder as a station's standard dated logs. Emergency logs are specific to XStudio, which supports the concept of having available a log that can be used for emergency situations.

To create an emergency log in ezSuite, edit any log so that it contains the program content you wish to use in case of an emergency. The log can be any length up to 24 hours. You might, for instance, create a log that contains only three or four hours of content - or create an entire day's worth of content to be used in an emergency.

When you are satisfied with the content, select the menu item **File | Emergency Logs | Save As an Emergency Log**. A dialog appears, containing the suggested name for the emergency log.



You can save the emergency log anywhere you wish, but for it to be used by XStudio for a particular station, it must be located in that station's log folder.



The standard naming convention for an emergency log for use with XStudio is in the form **EML_xx.log**, where the "**xx**" is the target station's Station Number. Typically, the Station Number would be something like "**S1**", although XStudio supports any 2-character combination as a Station Number. You can verify the Station Number by looking at the XStudio preference settings.

4.1.11 Log Validation

Log validation checks the items on a log to see if they exist in the inventory of the XStudio, DCS, or Maestro machine on which the log will be aired, and checks whether or not the item is valid for the log date. A report is generated that can be printed or saved to file.

You can validate logs that are either on disk or currently being edited in an ezSuite edit window. Validating a log that's already in an edit window is a bit faster in that the log and inventory are already present and do not have to be loaded from disk.

To validate a log, select the appropriate menu item or tool bar button, depending on whether you wish to validate a log you're currently working with or a completely different log. In the case you wish to validate a log from disk, a dialog is presented, allowing you to select the station and log to be validated. Then, a window similar to the one shown here is displayed. A gauge shows the progress of validation until complete.

Log Validation Status [XStudio EVO - Aug 05, 2009]

Statistics
 Log Elements: **1,573** Start: **2/6/2013 4:57:52 PM** Errors: **48**
 Inventory Count: **167** End: **2/6/2013 4:57:52 PM** Length-Checking: **None**

Default Data View: --- (All Carts) --- Cart Filters

Problem	Time	Cart	Description	Length	Type	CustNo	Beg Date	End Date
Missing	00:40	S704	Sister Golden - America	000:59	CM			
Date	01:40	Y101	The Story In Your Eyes MB	002:57	CM		03/29/2003	04/30/2004
Missing	01:40	S704	Sister Golden - America	000:59	CM			
Missing	02:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	02:40	S704	Sister Golden - America	000:59	CM			
Missing	03:40	S704	Sister Golden - America	000:59	CM			
Missing	04:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	04:40	S704	Sister Golden - America	000:59	CM			
Missing	05:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	05:40	S704	Sister Golden - America	000:59	CM			
Missing	06:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	06:40	S704	Sister Golden - America	000:59	CM			
Missing	07:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	07:40	S704	Sister Golden - America	000:59	CM			
Missing	08:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	08:40	S704	Sister Golden - America	000:59	CM			
Missing	09:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	09:40	S704	Sister Golden - America	000:59	CM			
Missing	10:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	10:40	S704	Sister Golden - America	000:59	CM			
Missing	11:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	11:40	S704	Sister Golden - America	000:59	CM			
Missing	12:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	12:40	S704	Sister Golden - America	000:59	CM			
Missing	13:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	13:40	S704	Sister Golden - America	000:59	CM			
Missing	14:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	14:42	S704	Sister Golden - America	000:59	CM			
Missing	15:30	S703	Band Run-Paul McCartney	000:60	CM			
Missing	15:40	S704	Sister Golden - America	000:59	CM			

Validation complete. Errors: 48 Displayed: 48 CAPS NUM

When the validation process is complete, you can scroll the bottom portion of the display to see individual items that have failed validation and why. The top portion of the display shows statistics about the log, inventory and number of validation errors.

Display Columns

Validation reports are displayed in a columnar format.



Report columns can be moved and re-sized as desired for each data view. The columns' location and size information are saved when the report window is closed and restored the next time a report window is opened.

Here's a brief description of the information displayed, by column:

<u>Column Name</u>	<u>Description</u>
Problem	The specific problem with validating the log item. Problems commonly include the cart's run dates not being valid for the log date, the log item is missing from the audio delivery system inventory, or the logged length of the item and its actual length do not match (if Length-Checking enabled).
Time	The scheduled log time.
Cart No	The number of the cart (audio file) played.
Description	Log description of the item.
Length	The playback length of a cart, expressed as minutes, seconds and hundredths of a second.
Type	The item's Type Code, also known as Commercial Type.
Cust No (Customer Number)	The customer number associated with the cart, if originally present on the broadcast log created by the traffic system.
Begin Date	If available, the begin date of the audio item. The date is retrieved from the audio delivery system's inventory.
End Date	If available, the end date of the audio item. The date is retrieved from the audio delivery system's inventory.

Cart Length-Checking

Validation can include cart length-checking. This feature is enabled or disabled from the **Options** menu. Select the [Cart Length Check](#) item and then set the +/- range, in seconds, to use. When length-checking is enabled, the validation process first checks the cart's date to ensure it's valid for the log date. Then, the logged length (from the log) is compared against the inventory's reported actual cart length (to AUX mark). If the actual length does not fall within the range of the logged length plus or minus the selected number of seconds, it is reported as having a length problem and will appear in the list of problems. If you change the number of seconds to evaluate, you're prompted to re-validate the log, which will now use the new value to determine if a cart meets the length requirements.

Filtering the Report

You can use the displayed Cart Mask combo box to select a cart filter to use. Cart filters are set up in Preferences and are global to both inventory filtering and validation report filtering. See the section in Preferences on Cart Filters for more information on creating cart filters. The effect of using cart filters is to include only cart numbers that match a given filter set, thus reducing the displayed validation errors to just those a particular user might want to see or take action on. For instance, the traffic department might be interested only in commercials that don't validate, not music or jingles or promos.

Sorting the Report

You can change the sort order of the items list - just click on the column name that you wish to use for sorting. Clicking once on a column sorts ascending; clicking a second time sorts descending.

Report Views

You can select different "views" of the data, which changes the display layout and affects which data is displayed. You can choose to display only date problems, only length problems, only missing carts or group data by problem type or cart number.

Printing the Validation Report

To print the validation information, click on the **[Print]** button on the tool bar or select the menu item **File | Print Validation Report**. A print dialog will be displayed, allowing you to select the printer, choose portrait or landscape mode, choose to print only selected items on the report, or cancel the print operation. The printed report may span more than one page, depending on the number of items that failed validation. The report columns will fit on a standard page in portrait mode, which is the default.



To print only a selected number of items, you can select multiple items in the display using the standard Windows methods for multiple item selection. Then, when printing, check the "Print Only Selected Items" checkbox. You can use this feature to print only one instance of a non-validated item rather than all 10 times the item appeared on the log.

Saving Validation Report Info to a File

You can save the validation information to a standard text file that can be opened in any text editor or word processor. Click on the **[Save]** button, or select **File | Save Validation Report**, and you'll be prompted to enter a file name and choose a location for saving.

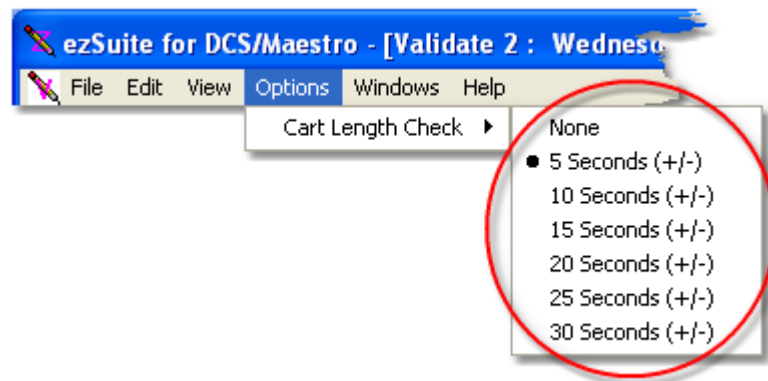


You can **[Right-Click]** on the items display to pop up a menu that also provides the print and save features.

4.1.11.1 Cart Length Checking

You can check logged lengths versus actual cart length (to AUX mark) as a part of the log validation process. Select the **"Options"** menu, then the appropriate length value. Select **"None"** if you wish to disable length-checking. The values displayed are +/- values, meaning the cart lengths will be considered out-of-range of the actual cart length is either more than or less than the selected number of seconds from the logged length.

The menu selection appears as a series of radio buttons, as shown. The selected length range will be displayed with a "dot" adjacent to the item.



If you change the cart length check value, you will be offered the opportunity to re-validate the current log using the new length check value.

ezSuite will remember the setting you make and it will be in effect the next time you open a validation window.

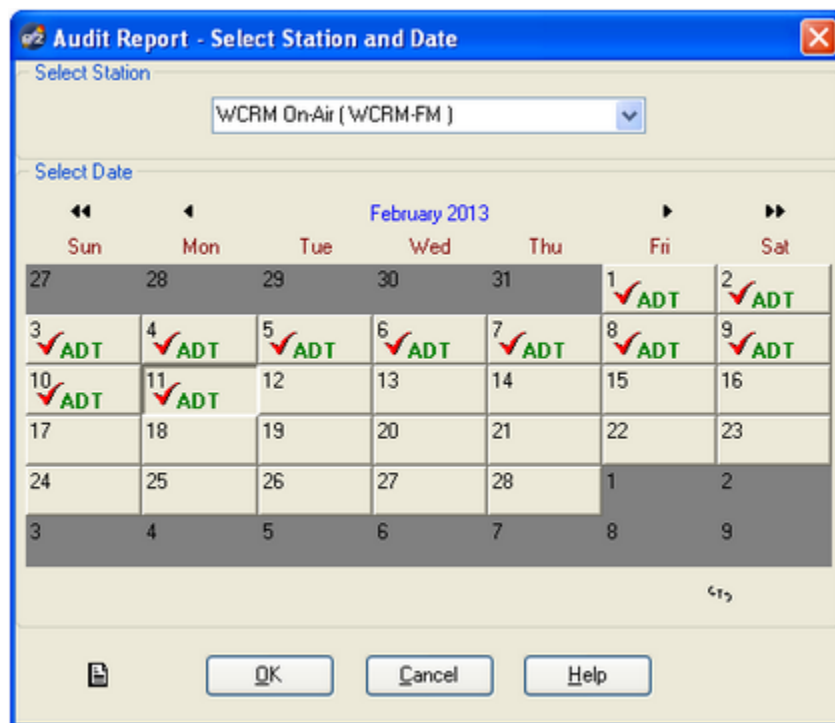
4.2 Audit Reporting

Basic operation of ezSuite for audit reports involves opening an audit file, manipulating the resulting report to display only the information you are interested in, and optionally printing or saving a report to file.

You can also create audit reports spanning multiple days.

4.2.1 Selecting a Station & Date

Each date for the selected station for which there is a valid audit data file is marked on the calendar for your convenience. If a date has no check-mark, no audit file for the station and date in question exists.



Select the date (and station) you want, then click on the **[OK]** button. The audit file will be loaded and displayed.



You can enable double-click actions on the calendar so you don't have to click on the **[OK]** button. See the section in [Preferences | User Interface](#) for information on enabling double-click.

4.2.2 Working with a Report

As initially displayed, **all data** is shown when you create a new report. You can then "slice and dice" the information to narrow down what you're looking at. As you change settings, the displayed data information is immediately updated. If desired, you can then print the displayed data or copy selected items to the Windows clipboard for subsequent pasting in another application.

The screenshot shows the ezSuite for XStudio/DCS/Maestro application window. The title bar reads "ezSuite for XStudio/DCS/Maestro - [Rpt 1 : Station My Station May 10, 2009 (1613 Records)]". The menu bar includes File, Edit, View, Windows, and Help. Below the menu bar are icons for various functions. The main window is divided into several sections: "Data View" with a dropdown set to "Default", "Cart Filters" with a dropdown set to "--- (All Carts) ---", and "Selected Report Template" with a dropdown set to "--- (All Data) ---". The main area contains a table with the following columns: Real Time, Log Time, Action, Function, Seq, CartNo, Description, Length, Agency, and CustNo. The table displays a list of records, including actions like "PcToSw", "SwToPc", "PlayCart", and "SMN #3", with descriptions such as "SetRowB Dcut 9876543210", "Internal 70 [BusD Din 10]", "SetBusA Ch 4 XxYy", and "John Beard Liners". The status bar at the bottom shows "File: L:\DCS\051009S9.ADT", "Records: 1613", "Displayed: 1613", and "CAPS NUM".

Real Time	Log Time	Action	Function	Seq	CartNo	Description	Length	Agency	CustNo
00:00:00		PcToSw				SetRowB Dcut 9876543210		111003FFDD	
00:02:59		SwToPc	Break			Internal 70 [BusD Din 10]		1C300400AA	
00:02:59		PcToSw				SetBusA Ch 4 XxYy		140F101AB3	
00:02:59		PcToSw				SetRowA DcutHL98765 3210		11000FEFF1	
00:02:59	00:02:01	PlayCart			Wx05	12a-6a	00:30:00	dk	
00:03:00		SwToPc	SMN #3			BusA Din 17 [17]		1C020000C4	
00:03:00		SwToPc	Do Nothing			Internal 66 [BusD Din 06]		1C300040E6	
00:03:29	00:02:02	PlayCart		14	T375-30	SMP Direct Response	01:00:00	Toothpick	SMP DI
00:04:29	00:02:03	PlayCart		1	T493-03	K R C Q News Promos	00:30:00	8:08am DDFH/MB	KRCQ N
00:04:59	00:02:04	PlayCart		8	T275-10	Airtime Media	01:00:00	Diabetes Line	AIRTIM
00:05:59		PcToSw				SetBusA Ch 1 4 XxYy		140F90F05D	
00:05:59		PcToSw				SetRowA DcutHL98 65 3210		11000F6F71	
00:05:59		PcToSw				SetRowB Dcut 98 6543210		1110037F5D	
00:05:59		SwToPc	SMN #6			BusA Din 14 [14]		1C00400086	
00:05:59		SwToPc	Liner			Internal 68 [BusD Din 08]		1C300100A7	
00:05:59		PlayCart		19	JUB-98	John Beard Liners	00:06:29	Our Name	
00:05:59		PcToSw				SetRowB Dcut 9876543210		111003FFDD	
00:10:11		SwToPc	SMN #1			BusA Din 19 [19]		1C0800008E	
00:10:11		SwToPc	Magical			Internal 71 [BusD Din 11]		1C300800AE	
00:10:11		PlayCart		3	MCJB-02	John Beard Magicals	00:02:99	FM 102.3 KRCQ	
00:13:03		SwToPc	SMN #9			BusB Din 12 [32]		1C101000F3	
00:13:03		SwToPc	PLAY BKMD			Internal 48 [BusC Din 08]		1C200100B7	
00:13:03		PlayCart		3	BKMD-04	Back End Jingle Medium	00:04:80	KRCQ	
00:16:32		SwToPc	SMN #1			BusA Din 19 [19]		1C0800008E	
00:16:32		SwToPc	Magical			Internal 71 [BusD Din 11]		1C300800AE	
00:16:32		PlayCart		4	MCJB-04	John Beard Magicals	00:02:99	RC 102 KRCQ	
00:21:01		SwToPc	SMN #3			BusA Din 17 [17]		1C020000C4	
00:21:01		SwToPc	Break			Internal 70 [BusD Din 10]		1C300400AA	
00:24:02		SwToPc	SMN #6			BusA Din 14 [14]		1C00400086	
00:24:02		SwToPc	Liner			Internal 68 [BusD Din 08]		1C300100A7	
00:24:02		PlayCart		21	JUB-99	John Beard Liners	00:06:38	All Day Long	
00:29:36		SwToPc	SMN #1			BusA Din 19 [19]		1C0800008E	
00:29:36		SwToPc	Magical			Internal 71 [BusD Din 11]		1C300800AE	
00:29:36		PlayCart		1	MCJB-01	John Beard Magicals	00:02:99	FM 102.3 KRCQ	

The status bar at the bottom of the display provides basic information about the report you are viewing, including the original file name, the total number of records extracted from the audit data file, and the displayed number records. The majority of the report window is taken up by the data display. You can navigate in the data display using the horizontal and vertical scroll bars or with keystrokes. See the section on [Keyboard Shortcuts](#) for details on keystrokes you can use to quickly navigate the report display.

Display Columns

As with most reporting tools, audit report data is displayed in a columnar format.



Report columns can be moved and re-sized as desired for each data report view. The columns' location and size information are saved when the report window is closed and restored the next time a report window is opened. Report view layouts are stored as a separate XML file in the application directory. See the topic on [application-generated files](#) for specific information on file names, etc.

Here's a brief description of the information displayed, by column:

<u>Column Name</u>	<u>Description</u>
Real Time	The actual time the event occurred.
Log Time	If an event came from the broadcast log, the log scheduled time appears here.
Action	The transaction type for the item, or action taken by the host DCS or Maestro system. For more information on action (or transaction) types, see the appendices.
Function	If the action is a DCS or Maestro function or an XStudio action, the function/action name is displayed in this column. For XStudio-generated audit files, this column will optionally display the log record ID value.
Seq (Sequence)	Any time a multi-cut cart is played, the rotational sequence number of that cut appears here.
Cart No	The number of the cart (audio file) played.
Description	Description of item. If the item is a cart, the description from the DCS, Maestro or XStudio systems. If the item is a switcher action, a description of what the action was.
Length	The actual playback length of a cart, expressed as minutes, seconds and hundredths of a second.
Agency	If the item is a cart, the agency description field from the host DCS, Maestro or XStudio. If the item is a switcher action, the switcher data associated with the action.
Cust No (Customer Number)	If the item is a cart, the customer number associated with the cart, if originally present on the broadcast log.
Ch (Channel)	If the item is a cart, the channel on which the cart played.
Status	The status of the event. For more information on status codes, see the appendices.



You can sort displayed data by column by clicking on the column text. The first time a column is sorted, it is in ascending order. The second time, it is sorted in descending order. A small graphic in the column heading indicates the sorted column and whether it's ascending or descending.

Filtering Data

You can reduce the number of items displayed by "filtering" the information. You can elect to show only certain types of information, only certain status codes, certain audio playback channels, certain cart

numbers and logged items only. When you change filtering, the effects are immediately reflected in the displayed data.

- a) **Transaction Codes** (or Actions). There are over 20 transaction codes (or Actions) that may be created by the host DCS or Maestro unit. You can select as many or few as you wish to be included in the report. Selection of Transaction Codes is made in the [Set Transaction Filters](#) dialog.
- b) **Status Codes**. For each action, there is a status of the action - was it successful, did it fail, what exactly happened? You can select as many or few as you wish to be included in the report. Selection of Status Codes is made in the [Set Transaction Filters](#) dialog.
- c) **Playback Channels**. Each DCS or Maestro unit may have as few as 1 playback channel available on the unit and as many as 8 playback channels. You can select the playback channels to include in the report. This is useful if you know that all "to-air" playback, for instance, occurs on playback channel one and wish to report only those playback actions that went "to air". Selection of Playback Channels is made in the [Set Transaction Filters](#) dialog.
- d) **Cart Filters**. You can report only certain cart numbers or ranges of cart numbers. Selection of a filter is made from the main report display. For information on setting up cart filters, see the topic on setting up [Cart Filters](#).
- e) **Data Views**. The Data View is a way to change how the report information is displayed. You can group information by hour, show only logged items and group logged items by hour in addition to the standard view of the information. Select a different view using the Data View dropdown list.

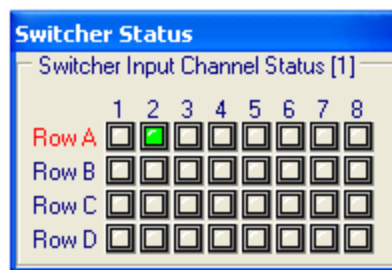
Once you have a group of settings (transaction and status filters, cart filters, views, etc.) that you like, you can save those settings as a report "template". Report templates are stored on disk and can be recalled at any time from the main report display using the Selected Report Template combo box. All settings contained in the template are used in immediately refreshing the displayed audit information when a template is selected. For more information on report templates, see the section on [Report Template Maintenance](#).

4.2.2.1 Switcher Status Panel

While working with displayed audit report data, you can optionally view a small audio switcher status panel. It is a visual way of seeing what a particular switcher item in a report did in terms of audio channels that were either turned on or off.

To display the status panel, select the main menu item **View | Switcher Status Panel**. If the menu item is unchecked, click on it to check it and display the panel. Move the panel around on the screen by **[Left-Click]** on the menu bar, holding the mouse down and dragging it to the new location. ezSuite will remember where you located the panel and restore its location next time you use the program.

The display, shown below, consists of 4 rows of 8 LED's, consistent with a typical audio switcher hardware front-panel display. if a LED on a given row is "lit", that means it's on (the channel is open).



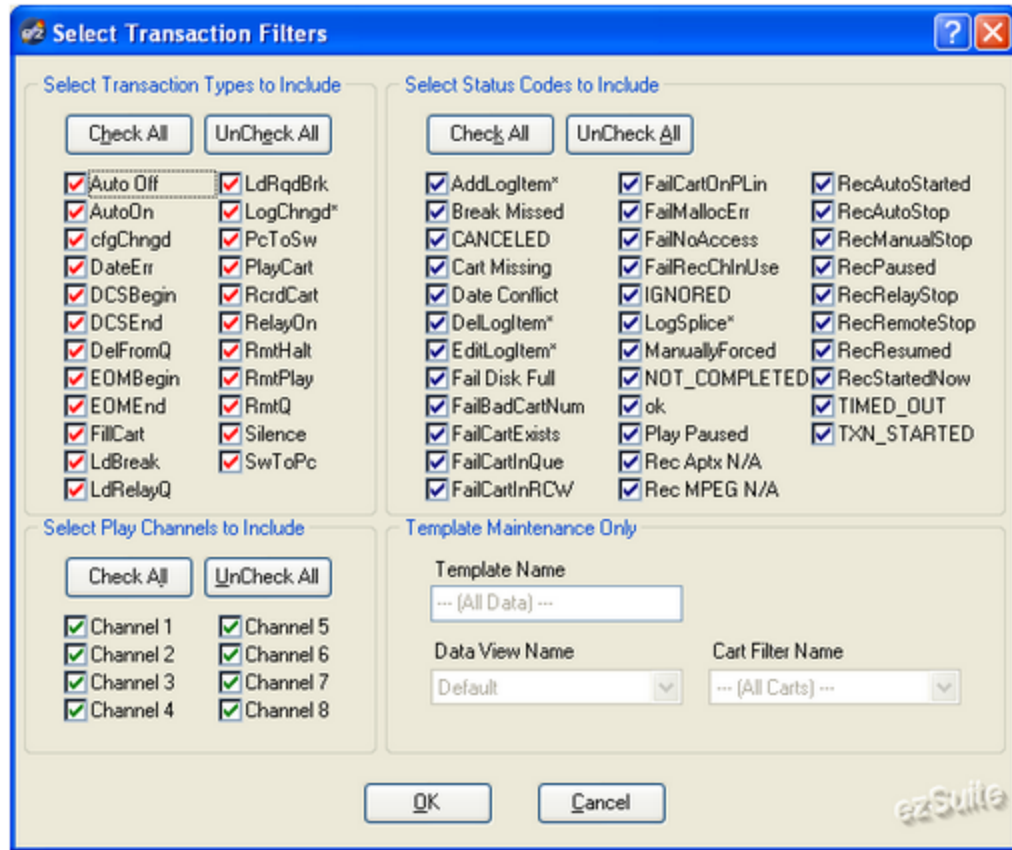
If you select a row in the displayed audit report, the switcher will be updated - if the selected row is a switcher command that affects the selected channels. Scroll down in the display with the **[DnArrow]** key and each time an item that changes the channel configuration is encountered, the status display will be updated to reflect the changes.



Audit report records only report changes on a single output bus. Thus, if you had a function that updated 4 output buses, there would be 4 audit report records, one for each bus. Scrolling through all 4 using the method described above would show you the state of the switcher after all 4 buses were updated by the function.

4.2.3 Selecting Transaction Filters

Choosing which transaction (action) codes, status codes and playback channels to include in an audit report is handled by the Set Transaction Filters dialog. Select **View | Select Transaction Filters** from the main menu to display the dialog.



Here, you can select transaction types to include in the report, status codes to include, and play channels to include. Checked items in each area are **included** in the report, unchecked items are not included (filtered out). You can check or uncheck all items in a category using the buttons associated with each. You can also select multiple items in a category, using standard mouse and key combinations, then **[Right-Click]** and choose to check or uncheck the selected items. Of course, clicking on an individual item will toggle the check mark.

When you have completed your selections, click **[OK]** to return to the report window - the displayed data will be immediately be updated to reflect your choices.



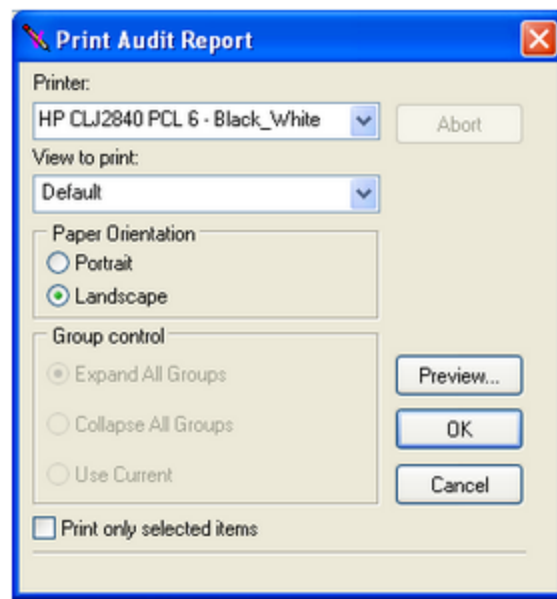
This dialog is also used in report template maintenance. The **Template Maintenance Only** items are disabled when using this dialog in conjunction with the main report window.

4.2.4 Printing Reports

You can print **displayed data** two ways - either all displayed data or selected records only. The information you're viewing is essentially a print preview - what you see is what you'll get, with a few minor differences. Reports are always printed in **landscape orientation**, meaning printed the "long way" on the page, to accommodate all columns and still be readable.

Printing a Complete Report

To print a complete report, select the menu item **File | Print Report**. You can also use the data view's pop-up menu. When you print the entire report, **all displayed data** is printed. A printer selection dialog is presented, allowing you to choose the target printer, as well as preview the output before it's actually sent to the printer.



Print Audit Report Dialog

During the print process, print status is reflected on the status bar at the lower left edge of the main display.

Printing Selected Records

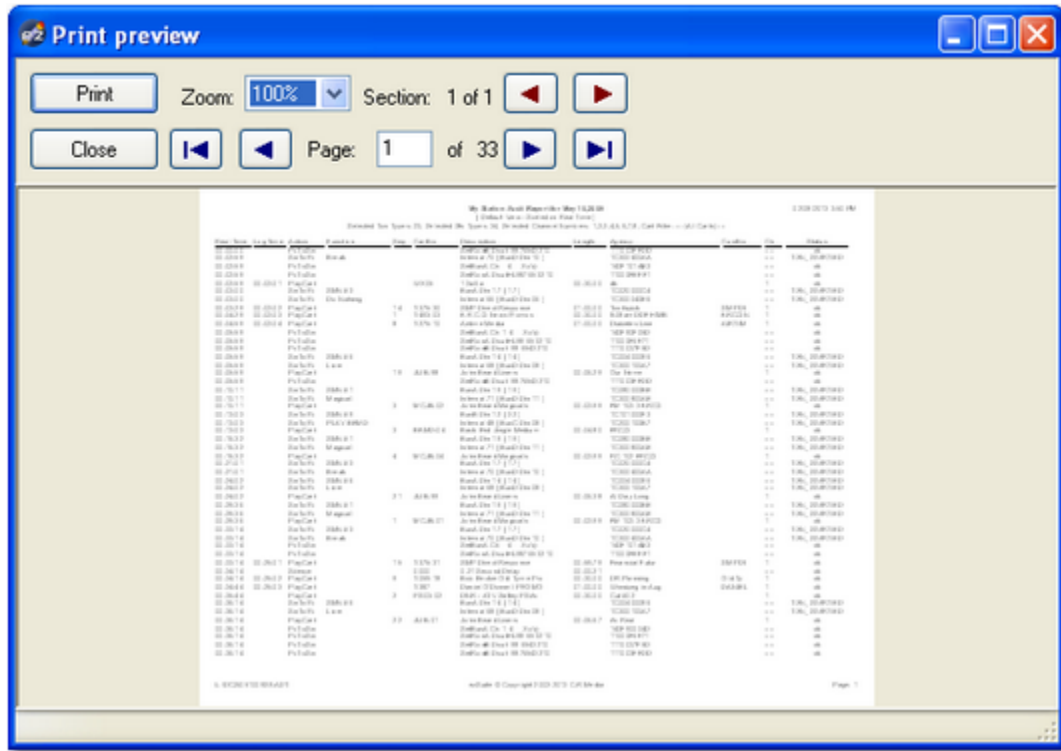
You can "select" one record or more and print only the selected records. To select multiple records for printing, first select a single record. Then, use either the **[Shift-Left-Click]** or **[Ctrl-Left-Click]** mouse combinations. Selected records are highlighted. Finally, **[Right-Click]** to pop up a menu and select the menu item **Print Selected Records Only**. Only the highlighted records will be printed. As with printing a full report, you have the option of previewing the printed output before actually sending it to the printer.



Printed reports reflect the information displayed on-screen. If you have sorted the information by, say, "**Description**", that's the way the printed report will be done. If you are viewing a report by hour and have just two of the hours displayed (expanded), just those two hour's detail data will be printed.

Previewing a Report Prior to Printing

While the ezSuite report display is essentially a preview of what will print, you can get a more complete representation by clicking the **[Preview]** button in print dialog. The print preview dialog shows the exact header layout and pagination.



Print Preview Dialog

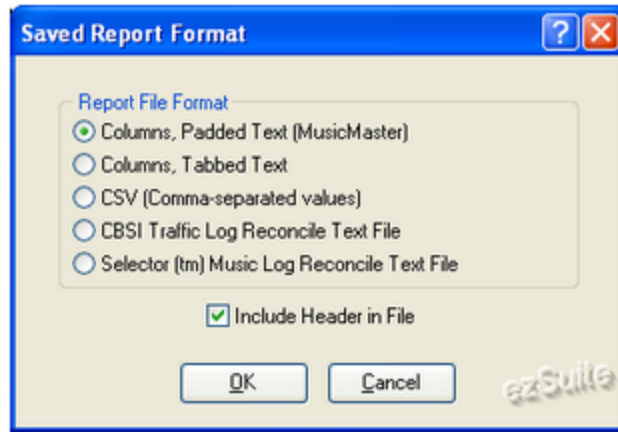
When initially displayed, the print preview dialog shows the report as a complete page within the borders of the dialog, as shown in the example. You can page forward and backward using the supplied buttons.

To make the preview more readable, expand the dialog to full-screen and use the **[Zoom]** control to set the size. Use **[Left-Click]** to zoom larger when the mouse cursor is over the report image, **[Right-Click]** to zoom smaller.

4.2.5 Saving Reports to a File

Once you have created an audit report, you can save the displayed report data to a file of your choosing. To save, select the menu item **File | Save Report to File** or click on the **[Save Report]** button on the toolbar.

A dialog showing the available types (formats) of files to save is present, similar to the one shown here. Select the file type you wish to save the data as, then click **[OK]**.



You can choose to include a report header. If the **Include Header in File** item is checked, the first line of the saved file will be each column's description.

You'll be next prompted to select a filename and folder location. Click **[OK]** after completing this task and the report is saved to the file you've designated.

Saved File Formats

ezSuite provides for the following types (formats) of files to be saved. File types and their usage is outlined below.



To use the reconcile features of Selector™ and CBSI, you must correctly set up cart filters so that only music or commercials that need to be reconciled in the target scheduling system are included in the report.

<u>Format (Type)</u>	<u>Explanation</u>
Columns, Padded Text	The report information is saved as an ASCII text file. Each column's data is padded with spaces to a fixed length.
Columns, Tabbed Text	The report information is saved as an ASCII text file. Each column's data is separated by a [TAB] character.
CSV (Comma-Separated Values)	The report information is saved as an ASCII text file. Each column's information is bracketed with quote (") and each column is separated by a comma (,).
CBSI Traffic Log Reconcile Text File	The report information is saved as an ASCII text file. Columns are ordered to match the requirements of the CBSI Traffic System.

Format (Type)**Explanation**

If you are migrating from CMAD and are using CBSI's ELR Limits, you may have to adjust these for the reconcile to work properly. Off CBSI's main ELR screen where eligible dates are displayed, there is a section called ELR Limits. In that section, there is a screen labeled "**Computer Concepts DCS Limits**", where you can set channel limits. You may have set a limit for channel 1 only, for instance. The entry may read something like "**CH1**". In ezSuite, only the channel number is picked up from the audit data, not the channel's name (defined in the DCS or Maestro configuration and not accessible to ezSuite). So, you'd need to change the channel limit to read "**1**" (in this example). CBSI looks for an exact channel name match if limits have been imposed.

Selector™ Music Log
Reconcile Text File

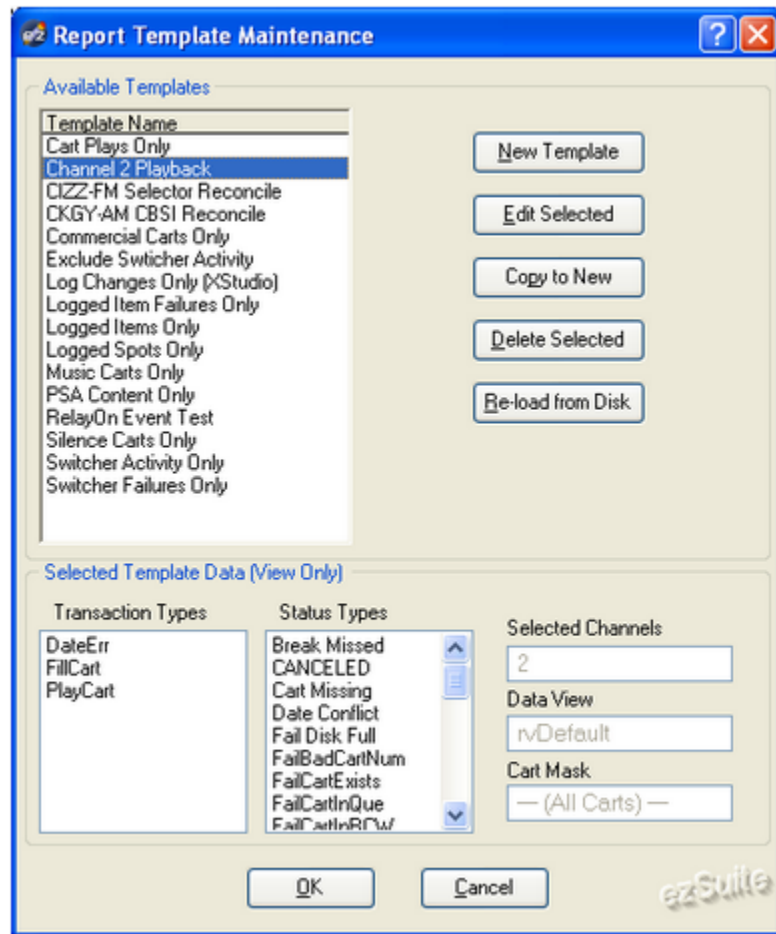
The report information is saved as an ASCII text file with an extension of .INP. This file meets the Linker Standard Schedule Output/Input Specification for electronic reconcile of the music log. To use the file, in Linker, go to Utilities, Interface to Other Products, then Schedule Reconciliation. Input the location, name of the file and the automation system. Then run the reconciliation.

4.2.6 Report Template Maintenance

A report template consists of a group of transaction codes, status codes, play channels, cart filters and a data view. Templates are organized by a user-defined name for each (which must be unique) of up to 30 characters in length. ezSuite stores all templates together in a file in the application directory. See the appendices for a list of files used and/or created by ezSuite.

You may have as many templates as you wish, limited only by available disk space.

You can create new templates on the fly from the main report window and you can select any of the available templates from the main report window. However, there are times when you may wish to edit, copy or delete templates. Access these functions by selecting the menu item **Edit | Report Template Maintenance** in the report window. A dialog similar to the one shown here is displayed.



The display contains a list of all available templates by name. The selected template's settings are displayed in the lower panel of the dialog.

Maintenance functions are performed by clicking on clearly-labeled maintenance buttons:

1. **New Template.** Create a new template. The current report settings are used. You will be prompted for a name for the new template.
2. **Edit Template.** Edit the selected template. A second dialog will be displayed, allowing you to edit each of the template items.
3. **Copy to New.** The selected template in the list will be copied to a new template. You will be

prompted for the new template name.

4. **Delete Selected.** The selected template will be deleted. You will be asked to confirm the deletion.
5. **Re-Load from Disk.** If you have made changes to templates, and do not wish to keep your changes, you can re-load the template information from disk. This action will restore the last saved template information, losing your changes in the process to templates, added or deleted



Changes made to templates in this dialog are not saved to disk until you click on the **[OK]** button and exit the dialog. If you click on the **[Cancel]** button, any changes made are lost and the original template information is restored from the hard disk.

When you click on the **[Edit Selected]** button (or double-click on a template name in the list), a secondary edit template dialog appears, similar to the example shown here. This dialog is where you make changes to transaction types, status codes, play channels, the data view and cart mask information.

Edit Template Information

Select Transaction Types to Include

Check All Uncheck All

☐ Auto Off	☐ LdRqdBrk
☐ AutoOn	☐ LogChngd*
☐ cfgChngd	☐ PcToSw
☒ DateErr	☒ PlayCart
☐ DCSBegin	☐ RcrdCart
☐ DCSEnd	☐ RelayOn
☐ DelFromQ	☐ RmtHalt
☐ EOMBegin	☐ RmtPlay
☐ EOMEnd	☐ RmtQ
☒ FillCart	☐ Silence
☐ LdBreak	☐ SwToPc
☐ LdRelayQ	

Select Status Codes to Include

Check All Uncheck All

☐ AddLogItem*	☒ FailCartOnPLin	☒ RecAutoStarted
☒ Break Missed	☒ FailMallocErr	☒ RecAutoStop
☒ CANCELED	☒ FailNoAccess	☒ RecManualStop
☒ Cart Missing	☒ FailRecChlnUse	☒ RecPaused
☒ Date Conflict	☒ IGNORED	☒ RecRelayStop
☐ DelLogItem*	☐ LogSplice*	☒ RecRemoteStop
☐ EditLogItem*	☒ ManuallyForced	☒ RecResumed
☒ Fail Disk Full	☒ NOT_COMPLETED	☒ RecStartedNow
☒ FailBadCartNum	☒ ok	☒ TIMED_OUT
☒ FailCartExists	☒ Play Paused	☒ TXN_STARTED
☒ FailCartInQueue	☒ Rec Aptx N/A	
☒ FailCartInRCW	☒ Rec MPEG N/A	

Select Play Channels to Include

Check All Uncheck All

☐ Channel 1	☐ Channel 5
☒ Channel 2	☐ Channel 6
☐ Channel 3	☐ Channel 7
☐ Channel 4	☐ Channel 8

Template Maintenance Only

Template Name
Channel 2 Playback

Data View Name
Default

Cart Filter Name
... (All Carts) ...

OK Cancel

Once you have completed your changes, click on **[OK]** to accept the revised information, or click on **[Cancel]** to abort the editing of the template.

4.2.7 Multi-Day Reports

On occasion, it's useful to be able to generate an audit report for a range of days. For instance, you might want to produce a report of all carts played on the air for a particular customer over the course of the month.

ezSuite's **Multi-Day Report** is designed for just this kind of need. In many ways, generating a report that covers multiple days is very similar to a standard daily audit report. However, because such a report could include a large number of days, therefore a large number of audit transactions loaded in memory, a Multi-Day Report differs from a daily report in that **only data matching the criteria in a specific report template is retrieved from disk**. Therefore, there's not as much on-the-fly flexibility when you're working with a Multi-Day Report.

Before generating your first Multi-Day Report, it's recommended that you review the section on [creating and maintaining report templates](#) and that you've created a template that restricts the report data to just those items you're interested in. To experiment with a template, you should generate a standard report for a single day, modify the transaction filters until you have what you're looking for, and save the settings as a new template.



Creating report templates and modifying transaction filters **is not supported** within a multi-day report view. Therefore, you must create a template while working with a single audit report date, save the template and then run the multi-day report.

You can, however, apply any defined cart filters and report views within the multi-day report view.

Creating a Multi-Day Report

To create a report, select the menu item "**Create Multi-Day Report**". A report settings dialog will appear, similar to the one shown here:

The screenshot shows a dialog box titled "Multi-Day Audit Report Setup". It has a standard Windows-style title bar with a close button (X) in the top right corner. The dialog is divided into three main sections, each with a label and a dropdown menu:

- Select Station for Report:** The dropdown menu shows "WCRM On-Air".
- Select Begin and End Dates for Report:** This section contains two dropdown menus. The "Start Date" dropdown shows "1/9/2013", and the "End Date" dropdown shows "2/8/2013".
- Select Template for Report:** The dropdown menu shows "Logged Item Failures Only".

At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

Here, you select the station you wish to report on, the start and end dates for the report, and a report template.



Audit report templates are common to both single-day and multi-day reports, making it easy to create a template while working with a single date, then apply that template to a multi-day report.

Once you've made your selections and click on the **[OK]** button, the report generation begins. During generation, a status dialog is displayed, advising you of the progress of the report. It includes the current data file being processed and a progress bar indicating the percentage of completion.

	Real Time	Log Time	Action	Function	Seq	CartNo	Description	Length	Agency
Date: 1/9/2013 (8)									
	01:15:37	01:00:04	PlayCart	900027		J951	FM 105	00:09.24	
	01:54:45	01:00:21	PlayCart	900044		J800	B101 / Amy Grant	00:07.92	
	02:44:21	02:00:18	PlayCart	900067		J951	FM 105	00:09.24	
	02:50:34	02:00:21	PlayCart	900070		J800	B101 / Amy Grant	00:07.92	
	02:54:05	02:00:23	PlayCart	900072		J801	B101 Jingle (.05)	00:02.60	
	03:41:38	03:00:16	PlayCart	900091		J800	B101 / Amy Grant	00:07.92	
	03:46:58	03:00:19	PlayCart	900094		J801	B101 Jingle (.05)	00:02.60	
	03:54:29	03:00:22	PlayCart	900097		J955	Y98 FM Jingle	00:02.00	
Date: 1/11/2013 (9)									
	01:15:17	01:00:04	PlayCart	1100027		J951	FM 105	00:09.24	
	01:54:26	01:00:21	PlayCart	1100044		J800	B101 / Amy Grant	00:07.92	
	02:44:01	02:00:18	PlayCart	1100067		J951	FM 105	00:09.24	
	02:50:14	02:00:21	PlayCart	1100070		J800	B101 / Amy Grant	00:07.92	
	02:53:46	02:00:23	PlayCart	1100072		J801	B101 Jingle (.05)	00:02.60	
	03:41:19	03:00:16	PlayCart	1100091		J800	B101 / Amy Grant	00:07.92	
	03:46:38	03:00:19	PlayCart	1100094		J801	B101 Jingle (.05)	00:02.60	
	03:54:09	03:00:22	PlayCart	1100097		J955	Y98 FM Jingle	00:02.00	
	08:12:58	08:00:03	PlayCart	1100176		(AOP	Name/Goo Goo Dolls	04:22.00	
Date: 1/12/2013 (1)									
	03:52:36	03:00:16	PlayCart	1200081		(CHE	As Any Fool/T.Lawrence	02:53.00	
Date: 1/13/2013 (8)									
	01:14:31	01:00:04	PlayCart	1300027		J951	FM 105	00:09.24	
	01:53:40	01:00:21	PlayCart	1300044		J800	B101 / Amy Grant	00:07.92	
	02:43:16	02:00:18	PlayCart	1300067		J951	FM 105	00:09.24	
	02:49:28	02:00:21	PlayCart	1300070		J800	B101 / Amy Grant	00:07.92	
	02:53:00	02:00:23	PlayCart	1300072		J801	B101 Jingle (.05)	00:02.60	
	03:40:33	03:00:16	PlayCart	1300091		J800	B101 / Amy Grant	00:07.92	
	03:45:53	03:00:19	PlayCart	1300094		J801	B101 Jingle (.05)	00:02.60	
	03:53:23	03:00:22	PlayCart	1300097		J955	Y98 FM Jingle	00:02.00	
Date: 1/14/2013 (1)									
	09:45:57	09:00:12	PlayCart	1400194		(CN8	GoodniteSweetht/D.Kersh	03:22.00	
Date: 1/15/2013 (8)									
	01:12:59	01:00:04	PlayCart	1500027		J951	FM 105	00:09.24	

Multi-Day Report Grouped by Date

When report generation is complete, all data selected for inclusion on the report is displayed. The display looks virtually identical to the standard single-day report, with the exception that the combo box for choosing a different report template is missing.

In the example report shown, only cart items that were on the log and failed to play have been included in the report, which is grouped by log date. While the example report covers only a few days, there is no limitation on the number of log dates that are used in a report, with the exception that the dates must be contiguous.

You can sort the report information on any of the columns, ascending or descending. There are also several standard data views available, which additionally filter and/or change the grouping of the

information. See the topic on [Report Data Views](#) for specific column information and how columns can be moved and re-sized.



Two additional standard report views are provided for the multi-day report, including one for grouping the selected items by day and one for grouping logged items only by day. Additionally, any [user-defined data views](#) you have created specifically for multi-day reports are available.

As with the standard single-day audit reports, you can print the information, preview the printed output or save it to a file. See the topics on [Printing Reports](#) and [Saving Reports to a File](#) for more information.

For more information on working with a report on-screen, see the section on [Working with a Report](#).

Filtering Data

Multi-day reports are mostly pre-filtered - a template has already been applied to the data to restrict which audit records are selected when the initial creation of the report is done, unlike standard single-day reports. You can, however, change the viewed report data in a couple of ways without having to recreate a report using a different template.

- a) **Cart Filters.** You can report only certain cart numbers or ranges of cart numbers. Selection of a filter is made from the Cart Filters dropdown list. For information on setting up cart filters, see the topic on setting up [Cart Filters](#).
- b) **Data Views.** The Data View is a way to change how the report information is displayed. You can group information by hour, show only logged items and group logged items by hour in addition to the standard view of the information. Select a different view using the Data View dropdown list.

4.2.8 User-Defined Data Views (Custom Data Views)

A data view is set of information that defines how data is displayed when looking at an audit report. This set of information includes things like the specific columns of information that will be displayed and grouping of information (by day, by hour, etc.).

ezSuite features a number these views pre-defined for both standard audit reports and multi-day audit reports. The pre-defined views cannot be modified.

However, there are times when you might want to view - or print - an audit report with an appearance different from the pre-defined data views. ezSuite provides the means to make a copy of an existing data view, then edit it to suit your purpose. Or, you can create a completely new data view from scratch. User-defined data views are saved automatically when you close an audit report window and will be available for use the next time you open a report.



Creating and saving your own data views will affect the time it takes to open an audit report dialog. The larger the number of user-defined views, the longer it will take to recreate those views when opening a report dialog, as they are reloaded from disk.

Creating a User-Defined Data View

To create a new view, select the menu item **Edit | Data Views | Create New Layout**. You'll be prompted for a name for the view and a dialog similar to the one shown here will appear:

Editing view layout "Presentation01"

Title:

Unused Fields:

RealTime!	LogTime!	Action!	Function!	Seq!	CartNo!	Desc!	Length!	Agency!	CustNo!	Channel!
Status!	HourField!	DateField!	Rate!							

Grouping:

Columns:

☒ Show Header ☐ Show Footer ☐ Show Group Counts ☐ Show Group Totals

Filter expression:

Filter: Insert field: at cursor.

Insert operator: at cursor.

Insert function: at cursor.

Sample Layout:

In this dialog, you select the columns (fields) you want displayed by dragging items from the **"Unused Fields"** list to the **"Columns"** list. As you drop a field on the columns list, the **"Sample Layout"** near the bottom of the display is updated to reflect the appearance of the data view. You can also group items by dragging an unused field to the **"Grouping"** list. For instance, dragging the field named **"HourField"** in the above example will cause all data for a specific hour to be grouped together.

Here's an example of the dialog once some fields have been dropped and a group field assigned:

This particular example would be used in a multi-day report and groups the information by log date ("DateField"). Displayed information will include the actual air time ("RealTime"), the cart number, sequence (cut, if any), the description, length, and agency field information. This sort of layout would be useful, for instance, if you needed to generate a report for a customer that reflects all times a spot ran for a given date range. Information that the advertiser would not be interested in is not displayed, making for an easier-to-understand report for the customer. You may have noticed another field in the layout, called "Rate" - it was included as an example of a [User-Defined Field](#) being used in a custom view.

You can also choose whether or not to display column headings ("Show Header" check box), footers, Group Counts (recommended if you are grouping items) and Group Totals.

Once you have organized the fields you want displayed, click on the **[OK]** button to save your changes. The main report display will reappear, with data displayed using your new data view.

Using Filter Expressions

You may have noticed a section in the dialog entitled "Filter Expression:". This section allows you to further filter information based on very flexible criteria.



If you create a Filter Expression in a data view, the Cart Filters combo box on the main display is disabled and only the filtering criteria you've established in the Filter Expression is used to determine the visibility of specific items. **Cart filters and Filter Expressions are mutually exclusive.**

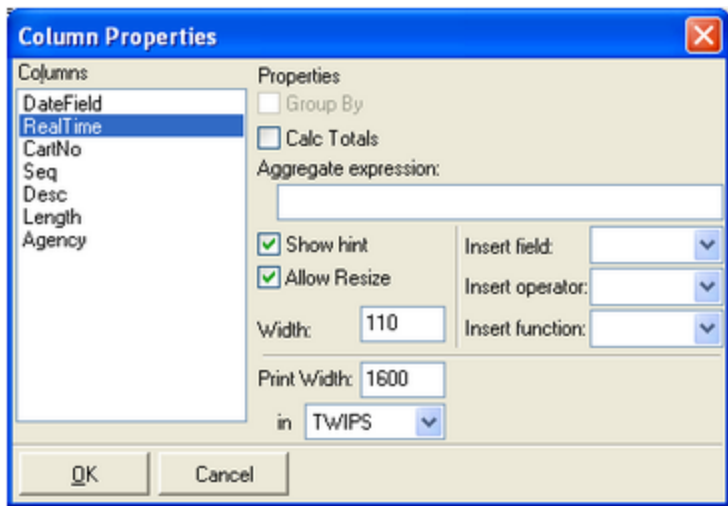
A Filter Expression has three (3) parts - a field to operate on, an operator ("=", ">", etc.), and a function. You can experiment with Filter Expressions by creating one, saving the data view and reviewing the results. If the results are not what you want, simply edit the data view and revise the Filter Expression until you get the desired results. If you wish to remove a filter expression, simply delete the contents of the Filter field by backspacing until the field is empty.

Filter Expressions can be simple or quite complex. Here are some example Filter Expressions and their meaning:

<u>Expression</u>	<u>Meaning</u>
LogTime > DATE '1899-12-30'	Using the field "LogTime", display only records whose date is greater than December 30, 1899. The effect is that only items that were on the log will be displayed in the data view.
CartNo = 'J104'	Using the field "CartNo", display only records whose cart number is J104. This would be similar to the standard Cart Filter.
CartNo = 'J104' OR CartNo = 'J105'	Using the field "CartNo", display only records whose cart number is J104 OR J105. This would be similar to the standard Cart Filter.
LogTime > DATE '1899-12-30' AND CartNo = 'J104'	Using the field "LogTime", display only records whose date is greater than December 30, 1899 AND using the field "CartNo", display only records whose cart number is J104. The effect is that only items that were on the log AND have a cart number of J104 will be displayed in the data view.

Setting Column Properties

You can edit various column settings for your data view by clicking on the [Column Properties] button. A dialog similar to the one shown here appears:



As you can see, there are several items you can modify. Of these, the one most often used is the "Print Width" property. This value controls with width of the selected field when printing and is independent of the displayed width. You can change this setting using any of the available measurement types in the dropdown combo box. The most common measurement width is "Inches".

You can also cause the selected field to be totaled, if desired, by checking the "Calc Totals" check box. The total value for the field is displayed in the footer for the column associated with the field, if the

custom report's "Show Footer" check box is checked. The displayed value is equivalent to an Aggregate Expression of "SUM(Field Name)".



The use of Aggregate Expressions is beyond the scope of this documentation. It is recommended that the Aggregate Expression field be left empty. Aggregate Expression results are displayed in the footer of a column and the "Calc Totals" check box must be checked. A sample of an Aggregate Expression that formats a dollar value and puts the dollar sign in front of the value is:

'\$ ' + FORMATNUMBER(SUM(RATE),2,TRUE)

4.2.8.1 User-Defined Fields (Custom Fields)

User-defined fields can be created for use in constructing a custom data view. Since no additional actual audit report data is available from the audit data file, by nature any fields you might create for use in a custom data view are **calculated fields**. This means the displayed field information is calculated within the report, based on criteria you define.

You might, for instance, create a custom field named **"Rate"** and assign a value to the field based on whether or not the report item is a valid cart number. Then, you could create a report for a customer, showing exact air-play times of the commercial along with the associated rate for the commercial. By customizing a data view, this new column can also be be totaled.

Creating a New Custom Field

To create a new field, select the menu item **Edit | Data Views | Edit Calculated Fields**. A dialog similar to the one shown here will appear, listing any custom fields you have defined. Click on on the **[New Field]** button to create a new field and fill in the information.

As shown above, you can assign a name to the field, a caption that will be displayed on the report (both on-screen and printed), alignment of the text, width and print width.

The most important part of the new field definition is the **"Expression"** used to calculate the displayed value. The expression can be quite simple or very complex, depending on your needs. Here are some example expressions and their meanings:

Expression

Meaning

'\$12.50'

This is the simplest of expressions. This field will display the text

Expression**Meaning**

Case When (Cartno = "") then
'\$0.00' else '\$12.50' end

"\$12.50" for every item in the report. Notice the single quote surrounding the expression.

case When (CartNo LIKE
'C305%') then '\$12.50' else
'\$0.00' end

This expression is more complex. When the CartNo field is blank, this column's text is "\$0.00", otherwise, the column text is "\$12.50".

In this case, when the CartNo field has a value LIKE "C305" (the percent symbol is a wildcard), the this field's text is "\$12.50", otherwise it is "\$0.00". The LIKE operator is useful if you're working with multi-cut carts, for instance, and want all cuts to be included in the calculation.

Case When (CartNo in
('S147','BY63','ID25')) then
'\$12.50' else '\$0.00' end

This example sets this field's text to "\$12.50" when the CartNo field is any of the cart numbers "S147", "BY63" or "ID25", otherwise it is "\$0.00".

It is important to note that you surround plain text entries in expressions with single quotes, as shown in the examples. Plain text entries would include things like the cart numbers in the examples and resulting value in the examples.

Deleting Custom Fields

If you no longer need a custom field you've created, you can delete the field by selecting the menu item **Edit | Data Views | Edit Calculated Fields**. When the edit dialog is displayed, select the field you wish to delete and click on the **[Delete]** button. The field will be removed from the list. Once a field is removed, it must be re-created from scratch if you decide you need it again.



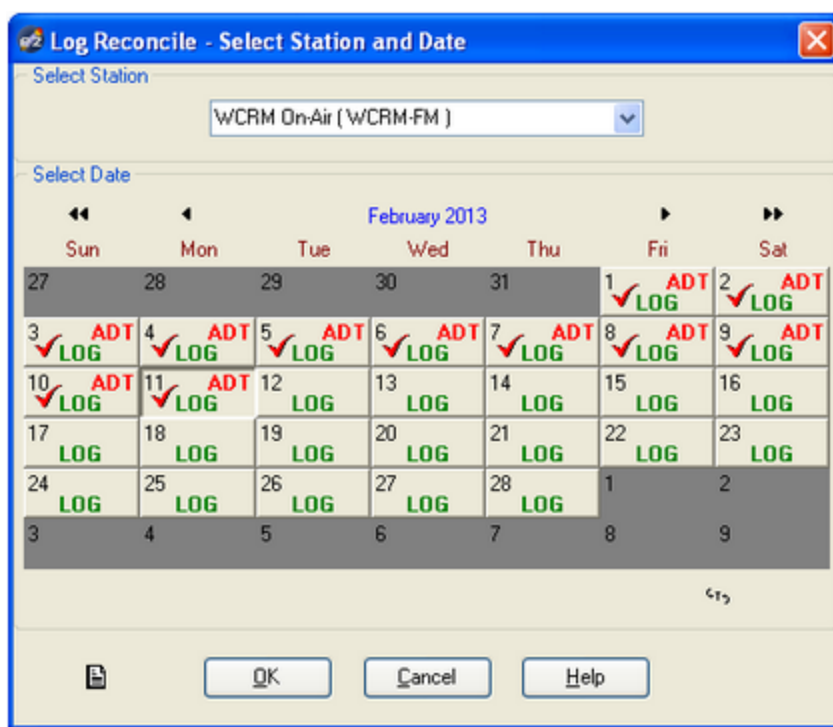
If the custom field is being used by one of your custom data views, you will not be able to delete the custom field until you have edited the custom data view and removed the field from either the Grouping or Columns section.

4.3 Reconciling Logs

ezSuite provides a method of comparing the original intent (a log) with what actually happened on the air (audit data). This comparison is often referred to as "reconciling a log". In order to reconcile a log, ezSuite must have access to both the original source log that was created, along with the XStudio, DCS, or Maestro audit data. All data for a given date is only available once the date has passed - in other words, once the log has been performed. Typically, a log reconcile is done the day following performance of the log to be reconciled.

4.3.1 Select a Station and Date to Reconcile

To generate a log reconciliation report, select the main menu item **File | Reconcile a Log**, or use the toolbar button that performs the same task. You are prompted to select a station and log date.



Each date for the selected station for which there are both a valid log file and a valid audit data file is marked on the calendar for your convenience. If a date has no check-mark, both files for the station and date in question are not present. Dates for which one or the other of the two required files exist are also noted, but there will be no check-mark for the date.



A given log date for station must have both a log and audit data file available to perform a reconcile. If one or the other does not exist, you are advised of which file is missing and the process will not continue until you either select a station and date with both files available or cancel the reconcile.

Select the date (and station) you want, then click on the **[OK]** button.

4.3.2 Working with a Reconcile Report

After selecting a station and date to reconcile, ezSuite will load the audit and log files, make a comparison, and display the results.

Initially, all data is shown when you create a new reconcile report. You can then "slice and dice" the information to narrow down what you're looking at. As you change settings, the displayed data information is immediately updated. If desired, you can then print the displayed data or save the displayed data to a file.

Type	Log Time	Real Time	Status	CartNo	Description	Log Len	Actual Len	Cust No	Prod Code	Age
Logged	01:00:04	01:14:30	Date Conflict	J951	FM 105	000.09	00:09.24			
Logged	01:00:21	01:53:38	Date Conflict	J800	B101 / Amy Grant	000.07	00:07.92			
Logged	01:00:24		Missed	J801	B101 Jingle (.05)	000.02				
Logged	01:00:25		Missed	(7E1	TooMuchHeaven/BeeGees	004.42				
Logged	02:00:18	02:43:14	Date Conflict	J951	FM 105	000.09	00:09.24			
Logged	02:00:21	02:49:27	Date Conflict	J800	B101 / Amy Grant	000.07	00:07.92			
Logged	02:00:23	02:52:58	Date Conflict	J801	B101 Jingle (.05)	000.02	00:02.60			
Logged	03:00:16	03:40:31	Date Conflict	J800	B101 / Amy Grant	000.07	00:07.92			
Logged	03:00:19	03:45:51	Date Conflict	J801	B101 Jingle (.05)	000.02	00:02.60			
Logged	03:00:22	03:53:22	Date Conflict	J955	Y98 FM Jingle	000.02	00:02.00			
Logged	06:00:15		Missed	(AJH	I Only Wanna Be/Hootie	003.39				
Logged	12:00:12		Missed	(AUD	DoThatToMeOneMoreTime/C&T	003.55				
Logged	12:00:13		Missed	(AJE	WeddingSong/PaulStookey	003.38				
Logged	12:00:14		Missed	(AJH	ButterflyKisses/BobCrise	004.55				
Logged	13:00:10	13:34:25	CANCELED	(AVC	PromiseAintEgh/Hall&Oats	004.14	04:14.00			
Logged	18:00:16		Missed	(H23	MMMBop/Hanson	003.44				
Logged	22:00:15		Missed	(H5A	BabyOneMoreTime/BtrySprs	003.28				
Logged	22:00:16		Missed	(H5B	ThankYou(p)/AMorissette	004.05				
Logged	22:00:17		Missed	(H5D	HaveYouEver(edit)/Brandy	003.26				
Logged	23:00:16		Missed	(H5E	BackToGood/Matchbox20	005.29				

Reconcile Report - Discrepancies Only

The majority of the report window is taken up by the data display. You can navigate in the data display using the horizontal and vertical scroll bars or with keystrokes. See the topic on [keyboard shortcuts](#) for details on keystrokes you can use to quickly navigate the report display.

The status bar at the bottom of the display provides basic information about the report you are viewing, including the total number of records, the displayed number records, and the total number of discrepancies.



An item is considered a discrepancy if it appeared on the original log and was not found in the audit data, is a logged item from a different day, or is a logged item that did not play properly.

Display Columns

As with most reporting tools, reconcile report data is displayed in columnar format. Here's a brief description of the information displayed, by column:

<u>Column Name</u>	<u>Description</u>
Type	This column describes the data type - possible values are: Logged (it appeared on the original source log), Non-Log (an item played but not on the original source log), or Wrong Day (an item that may have played, but was logged for another day).
Log Time	If an event came from the broadcast log, the log scheduled time appears here.
Real Time	The actual time the event occurred, if applicable.
Status	The status of the event. For more information on status codes, see the topic on Status Codes .
Cart No	The number of the cart (audio file) played.
Description	Description of item. If the item is a cart, the text is the description from the XStudio, DCS, or Maestro system. If the item is a switcher action, it is a description of what the action was.
Log Length	The scheduled length of the item, taken from the original source log.
Actual Length	The actual playback length of a cart, expressed as minutes, seconds and hundredths of a second.
Cust No (Customer Number)	The customer number associated with the cart, if originally present on the broadcast log.
Product Code	The product code associated with the cart, if originally present on the broadcast log.
Agency	The agency description field from the host XStudio, DCS, or Maestro.
Ch (Channel)	The audio channel on which the cart played.



You can sort displayed data by column by clicking on the column text. The first time a column is sorted, it is in ascending order. The second time, it is sorted in descending order. A small graphic in the column heading indicates the sorted column and whether it's ascending or descending.

Filtering Data

You can reduce the number of items displayed by "filtering" the information. You can elect to show only certain types of information, certain cart numbers and originally logged items only. When you change filtering, the effects are immediately reflected in the displayed data.

1. **Data Views.** The Data View is a way to change how the report information is displayed. You can group information by hour, show only logged items and group logged items by hour in addition to the standard view of the information. Select the Data View combo box on the main report display to change the view style. There are standard views to group data by hour, display only discrepancies, logged discrepancies only and non-log discrepancies to name a few. Experiment with changing the data view until you are seeing just the information you need - changing the view does not affect the underlying information.
2. **Cart Filters.** You can report only certain cart numbers or ranges of cart numbers. Selection of a filter is made from the main report display. For information on setting up cart filters, see the section in Preferences on [Setting Up Cart Filters](#).

Proximity Matching

The reconcile process tries to match the log's original scheduled time with the audit data's record of the scheduled log time. This should not be confused with the actual air-play time, rather, the reconcile wants to match perfectly log and audit data items based on the **scheduled air-play time**.

Occasionally, the program log may "change" sometime after the item is played and before a reconcile report is generated. Generally, the changes are the result of someone modifying the log external to the on-air delivery system and then saving it - and the updated log included changes to log times prior to when an item was actually played by the on-air system. The effect of this is that the scheduled log time in the audit data will no longer match the updated log's scheduled time, resulting in a discrepancy when a reconcile is run.



Specific to XStudio, operators can edit the log in the control room. If the log is not subsequently saved by the operator, a larger-than-usual number of discrepancies can occur when a reconcile report is generated.

ezSuite's reconcile process can be changed to account for this sort of problem, using the **Proximity Matching** controls, located adjacent to the Cart Filters in the reconcile window.

Proximity matches can be based on either **minutes** or **log positions**. These methods provide a means to more accurately reconcile a log when the original logged time of an item was changed but the original source log does not reflect the changed time. If one of the proximity search options is enabled, the reconcile process will look back and look forward from the logged time in an attempt to find a matching audit record, based on the log time. The search "window" is set by the user, allowing flexibility in how "close" the item must be before a "match" is declared.

Proximity Match Options

There are three proximity match options - **None** (the default), **Time**, and **Position**.



As you change proximity match options, the reconcile will automatically reprocess the data. You can also force reprocessing - **[Right-Click]** on the report, then select the pop-up menu item **"Redo Reconcile with Current Settings"**.

1. **None.** When the default match option is set, no additional record matching is done if the scheduled log time and the audit data's scheduled log time do not match
2. **Time.** ezSuite will look for a matching audit record that falls within the user-selected number of minutes (plus or minus) of the log's scheduled time. **Maximum range is +/- 30 minutes.**
3. **Position.** ezSuite will look for a matching audit record that falls within the user-selected number log

positions (plus or minus) of the log's scheduled time position. **Maximum range is +/- 20 log positions.**



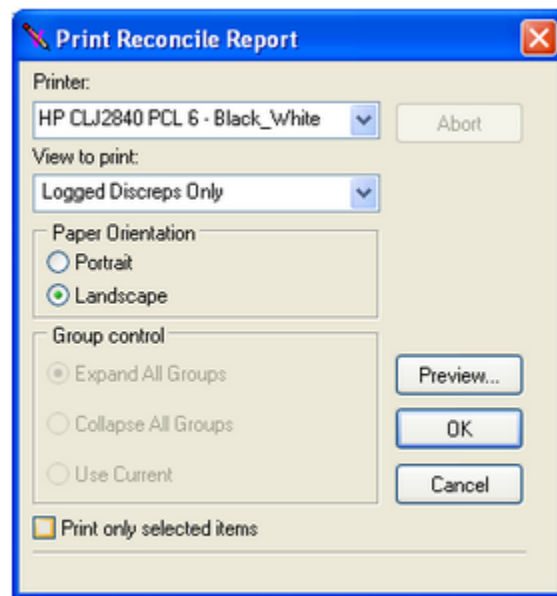
When you have either Time or Position proximity-matching selected, ezSuite does not automatically refresh the report when you change the **Range** setting. This is deliberate - to avoid excessive reprocessing of the data for each "tick" in the range as the slider is moved. You can manually reprocess the data after changing the range setting by selecting the **"Redo Reconcile with Current Settings"** pop-up menu item.

ezSuite saves your proximity matching options when you close the reconcile window and restores them the next time you do a reconciliation. In addition to the selected proximity type, the time and position range values are stored whether or not you actually used them.

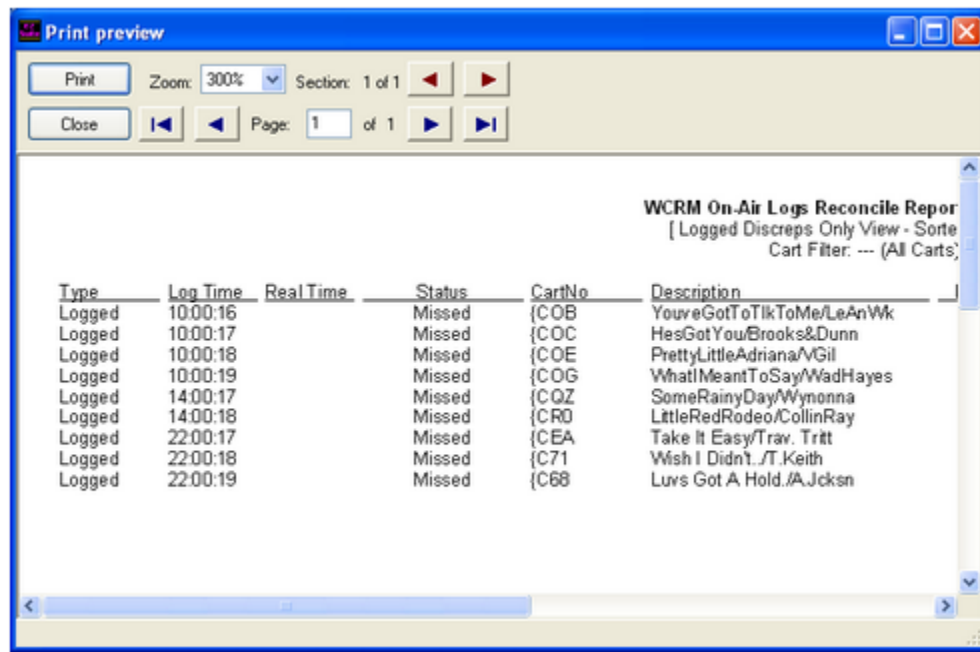
4.3.3 Printing Reconcile Reports

You can print displayed reconcile data two ways - either all displayed data or selected records only. The information you're viewing is essentially a print preview - what you see is what you'll get, with a few minor differences. Reports are always printed in landscape orientation, meaning printed the "long way" on the page, to accommodate all columns and still be readable.

To print a reconcile report, select the **File | Print Reconcile Report** menu item, or click on the **[Print]** button on the toolbar. A print dialog appears, similar to the one shown.



The print dialog allows you to select the target printer, the report view to print (defaults to current view), orientation, group display and an option to print only selected items. You can preview the report before actually sending it off to the printer by clicking on the **[Preview]** button.



Reconcile Report Print Preview

In the print preview window, you can page through the report, zoom in or out, and re-size the window as needed to get a sense of what the actual printed output will look like. If you are satisfied with the report appearance, click on the **[Print]** button to send the report off to the printer.

Printing a Complete Report

To print a complete report, select the menu item **File | Print Reconcile Report**. You can also use the data view's pop-up menu. When you print the entire report, all displayed data is printed by default. A printer selection dialog is presented, allowing you to choose the target printer.

Printing Selected Records Only

You can "select" one record or more and print only the selected records. To select multiple records for printing, first select a single record. Then, use either the **[Shift-Left-Click]** or **[Ctrl-Left-Click]** mouse combinations. Selected records are highlighted. Finally, **[Right-Click]** to pop up a menu and select the menu item **Print Reconcile Report**. When the print dialog is presented, select (check) the option **Print Only Selected Items**. Only the highlighted records will be printed.



Printed reports reflect the information displayed on-screen. If you have sorted the information by, say, "**Description**", that's the way the printed report will be done. If you are viewing a report by hour and have just two of the hours displayed (expanded), just those two hour's detail data will be printed.

4.3.4 Saving Reconcile Reports to File

You can save the reconcile information to a standard text file that can be opened in any text editor or word processor. Click on the **[Save]** button, or select **File | Save Reconcile Report**, and you'll be prompted to enter a file name and choose a location for saving.



You can **[Right-Click]** on the reconcile items display to pop up a menu that also provides the print and save features.

The information is saved as columnar text and appears similar to the sample here when viewed in a text file viewer like Notepad (the last few columns are clipped to save space).

Type	Log Time	Real Time	Status	CartNo	Description
Logged	10:00:16		Missed	{COB	YouveGotToTlkToMe/LeAnWk
Logged	10:00:17		Missed	{COC	HesGotYou/Brooks&Dunn
Logged	10:00:18		Missed	{COE	PrettyLittleAdriana/VGil
Logged	10:00:19		Missed	{COG	WhatIMeantToSay/WadHayes
Logged	14:00:17		Missed	{CQZ	SomeRainyDay/Wynonna
Logged	14:00:18		Missed	{CR0	LittleRedRodeo/CollinRay
Logged	22:00:17		Missed	{CEA	Take It Easy/Trav. Tritt
Logged	22:00:18		Missed	{C71	Wish I Didn't../T.Keith
Logged	22:00:19		Missed	{C68	Luvs Got A Hold./A.Jcksn

Reference

Part



V

This section contains more detailed background information on a number of key subjects that will help you to gain a better understanding of how ezSuite works.

Studying these sections is not absolutely essential but it will make it much easier for you to use ezSuite more efficiently and effectively.

5.1 Menus & Toolbars

Main Tool Bar

The tool bar provides convenient shortcuts to often-used functionality. Note that some buttons may be disabled if a particular item is not applicable.



The main tool bar can be anchored to any one of the sides of the main application window. Its position is "remembered" the next time ezSuite is launched.

Log Editing Tool Bar

When a log is opened, the tool bar has a number of additional buttons available that are specific to the log editing dialog.



Additional tool buttons include printing and log saving shortcuts.

Audit Reporting Tool Bar

Audit report windows contain a toolbar similar to the example here.



Log Reconcile Tool Bar

Reconcile windows display a toolbar similar to the example.



Main Menu

The ezSuite menu structure is dynamic in nature. Some menu items are enabled or disabled, and additional menu items may appear, depending the task being performed.

5.2 Keyboard Shortcuts

There are a number keyboard shortcuts implemented in ezSuite. The tables below show available shortcuts and their meaning.

NOTE: Where applicable, special mouse actions are also listed.

Main Application Window (Global Shortcuts)

These shortcut keys are active anywhere on the main report window. It does not matter which control is active, these keystrokes are global in nature.

<u>Shortcut</u>	<u>Meaning</u>
[F1]	Help - launches the help file.
[Ctrl-F10]	Activates the main menu for keyboard menu navigation.
[Ctrl-X]	Exit - closes the application.
[Tab], [Shift-Tab]	Tab key - move from one control to another on the main display. You will be cycled through the report view selection, filter selection, template selection and the report data view. [Tab] moves forward, [Shift-Tab] moves backward.

Main Log Dialog (Log Edit Window Only)

These shortcut keys are active anywhere on the main display. It does not matter which control on the main display is active, these keystrokes are global in nature.

<u>Shortcut</u>	<u>Meaning</u>
[F1]	Help. Launches the help file.
[F11]	Search the Log. Displays the Log Search dialog.
[F12]	Search Again. Repeats the last search on the log, starting from the most recent successful search. No dialog is displayed.
[Ctrl-O]	Open a Log. Displays the Open Log dialog.
[Ctrl-P]	Print Log. Displays the log printing dialog.
[Ctrl-V]	Validate Log. Displays the log validation dialog.
[Ctrl-X]	Exit - closes the application.
[Tab], [Shift-Tab]	Tab key - move from one control to another on the main display. You will be cycled through the report view selection, filter selection, template selection and the report data view. [Tab] moves forward, [Shift-Tab] moves backward.

Log Content Display Table (Log Edit Window Only)

When the log display is the active control on the main display, the following shortcut keys may be used.

<u>Shortcut</u>	<u>Meaning</u>
[F2]	Jump to a time on the log - a time locator.
[F3]	Edit selected log item. Launches the appropriate edit dialog for the selected log item.
[Ctrl-F3]	Copies the selected spot record to the spot clipboard for use in pasting the item into the log. ONLY spot (commercial) records are copied to the clipboard.
[F4]	Find next Directive on the log.
[Shift-F4]	Find previous Directive on the log.
[F8]	Find next Open Availability on the log.
[Shift-F8]	Find previous Open Availability on the log.
[F10]	Save the log. If the log already exists on disk, you are prompted to overwrite it.
[Shift-F10]	Save Log As.. Activates the save log dialog to save the current log as another log date.
[Ins]	Insert a new log item. Launches the insert dialog, where you choose the type of log item to insert.
[Ctrl-Ins]	Paste a spot record. Pastes a spot record from the spot clipboard into the log at the selected position.
[Del]	Delete a log item. Deletes the selected log item after confirmation by the user.
[Double-Click]	Edit selected item. Launches the appropriate edit dialog for the selected log item.
[Right-Click]	Displays a pop-up menu with options associated with the log and selected log item.
[UpArrow], [DnArrow]	Move up or down one item on the log.
[PgUp], [PgDn]	Page up or down. Moves one page up or down on the log.
[Ctrl-Home]	Move to the beginning of the log. Positions the cursor at the first log record.
[Ctrl-End]	Move to the end of the log. Positions the cursor at the last log record.
[Left-Arrow], [Right-Arrow]	Scroll left or right on the selected log row. Useful if all log columns are not visible.

Inventory Display Area (Log Edit Window Only)

When the inventory list is the active control on the main display, the following shortcuts may be used.

<u>Shortcut</u>	<u>Meaning</u>
[Right-Click]	Displays a pop-up menu for tasks associated with the inventory

<u>Shortcut</u>	<u>Meaning</u>
	list.
[UpArrow], [DnArrow]	Move up or down one item in the inventory list.
[PgUp], [PgDn]	Page up or down. Moves one page up or down in the inventory list.
[Home]	Move to the first item in the inventory list.
[End]	Move to the end of the inventory list (the last item).
[LeftArrow], [RightArrow]	Scroll left or right on the current row of the inventory. Useful if all inventory columns are not visible.

Log Item Edit Dialogs

These shortcuts are available in all of the log item edit displays.

<u>Shortcut</u>	<u>Meaning</u>
[F1]	Context-sensitive help for the selected field.
[Enter]	Move to the next field or button in the dialog.
[Tab], [Shift-Tab]	Move from one control to another in the dialog. [Tab] moves forward, [Shift-Tab] moves backward.
[Right-Click]	Displays a field edit menu, typically Cut , Copy , and Paste . Not all fields in the edit dialogs support cut, copy or paste, depending on the field's usage.

Log Validation Display (Log Validation Window Only)

These shortcuts are available in the Log Validation display.

<u>Shortcut</u>	<u>Meaning</u>
[F1]	Help - launches the help file.
[Ctrl-X]	Exit - closes the application.
[Tab], [Shift-Tab]	Move from one control to another in the dialog. [Tab] moves forward, [Shift-Tab] moves backward.
[Home]	Move to the beginning (first displayed record) of the validation data.
[End]	Move to the end (last displayed record) of the validation data.
[Shift-Left-Click]	Enables multi-select of validation data. Contiguous items are selected.
[Ctrl-Left-Click]	Non-sequential multi-select of validation data. Only items clicked on are selected or de-selected.
[Right-Click]	Displays a pop-up menu for printing and saving validation reports.

Audit Report Data Display Area (Report View Window Only)

When the audit report data is the active control on the main display, the following shortcuts may be used.

<u>Shortcut</u>	<u>Meaning</u>
[F2]	Jump to time - displays a dialog to enter the time value to search for.
[F5]	Refresh audit data - the source audit data file is reloaded (refreshed) from disk.
[Ctrl-C]	Copy selected report records to the Windows clipboard.
[Ctrl-M]	Displays the Report Template Maintenance dialog.
[Ctrl-T]	Save the current report settings as a new template.
[Right-Click]	Displays pop-up menu for printing, copying data to clipboard.
[Left-Click]	Selects the record you click on. This single record can now be printed or copied to the clipboard.
[Shift-Left-Click]	If another record is selected, all records between it and the record you click on are selected. Used to select records for selective printing or copying to the clipboard.
[Ctrl-Left-Click]	If other records are selected, the record you click on is added to those already selected. Used to select records for selective printing or copying to the clipboard.
[UpArrow], [DnArrow]	Move up or down one item in the report.
[PgUp], [PgDn]	Page up or down - moves one page up or down in the report.
[Home]	Move to the beginning of the report.
[End]	Move to the end of the report.
[LeftArrow], [RightArrow]	Scroll left or right on the current row of the report.

Log Reconcile Display

These shortcuts are available in the Log Reconcile display.

<u>Shortcut</u>	<u>Meaning</u>
[Right-Click]	Displays pop-up menu for printing, copying data to clipboard.
[Left-Click]	Selects the record you click on. This single record can now be printed or copied to the clipboard.
[Shift-Left-Click]	If another record is selected, all records between it and the record you click on are selected. Used to select records for selective printing or copying to the clipboard.
[Ctrl-Left-Click]	If other records are selected, the record you click on is added to those already selected. Used to select records for selective

<u>Shortcut</u>	<u>Meaning</u>
	printing or copying to the clipboard.
[UpArrow], [DnArrow]	Move up or down one item in the report.
[PgUp], [PgDn]	Page up or down - moves one page up or down in the report.
[Home]	Move to the beginning of the report.
[End]	Move to the end of the report.
[LeftArrow], [RightArrow]	Scroll left or right on the current row of the report.

5.3 Cart Masks Explained

Cart masks are used to identify carts (audio files) that might be grouped together. A cart mask must be exactly 4 (four) characters in length. Mask entry dialogs will not allow entries that are too short and will not accept more than 4 characters entered.

The "?" (question mark) or the "*" (asterisk) characters are "wildcards", meaning a letter or number is valid in its position in the mask. The "?" and "*" characters can be used interchangeably as they have the same meaning in cart mask evaluation. A third wildcard that can be used is the "#" (pound sign) character. When used in a cart mask, only numbers (0 through 9) are valid in its position in the mask. These are the only wildcard characters allowed for a cart mask - all other characters will be interpreted literally.

Valid characters for a cart mask, besides the "?" (question mark), "*" (asterisk) and "#" (pound sign) include the letters **A .. Z**, the numbers **0 .. 9** and the characters "{", "}" and "!" (exclamation).

A valid cart mask will include one or more "?", "*", or "#" characters (although it doesn't have to) and other letters or numbers that match up with cart types that you wish to have grouped together. Examples of valid cart mask include:

<u>Mask</u>	<u>Result</u>
C???	Carts beginning with the letter "C" and any 2nd, 3rd and 4th character will be included.
PR??	Carts with the first two characters of "PR" and any 3rd and 4th character will be included.
?R??	Carts with any first character, a second character of "R" and any 3rd and 4th characters will be included.
Z?A?	Carts with a first character of "Z", any 2nd character, a third character of "A" and any 4th character will be included.
VT##	Carts with the first two characters of "VT" and a number in the 3rd and 4th characters will be included.
C***	Carts beginning with the letter "C" and any 2nd, 3rd and 4th character will be included.
C??#	Carts beginning with the letter "C", containing any character in the 2nd and 3rd positions, and a number (0 through 9) in the 4th position will be included.
####	Only carts with a number (0 through 9) in each character position will be included.



A cart mask of "?????" or "*****" (or any combination of the two wild card characters) is the same as saying "**any card number is valid**", which means all carts would match such a mask.

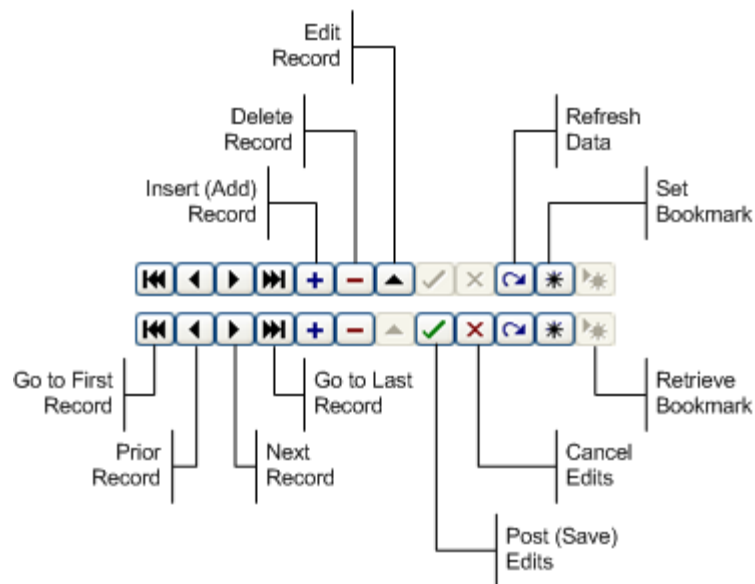
Combining a number of cart masks for use in a cart category will group all carts that meet at least one of the cart masks. For instance, you could have a filter called "**R** Carts" that has 4 cart masks - "**R**???", "?**R**??", "??**R**?" and "???**R**". The result of using this cart filter would be that every cart in the inventory that has the letter "**R**" in any character position (1st, 2nd, 3rd or 4th) would be a match.

5.4 Using Data Navigators

Some areas in ezSuite make use of so-called "data navigators". Essentially, a data navigator is an organized set of buttons that provides an easy-to-use interface for navigating around in displayed data like station definitions and cart filters. In addition to navigation, some of the navigators include buttons to add (insert), edit, & delete items.

Two example navigators are shown here - there are two because the "state" (availability) of buttons will vary depending on the current task. For instance, if you are at the beginning of a cart filter list, the navigator buttons for moving backwards through the log are disabled - at least, until you move away from the beginning of the list.

Data Navigator Button Map



Depending the area of ezSuite you're working in, some of the navigator buttons depicted are not visible because the functionality they provide is not allowed.

5.5 Audit Times Information

You may encounter a situation where ezSuite displays the "real time" of audit report items incorrectly. Most often, you'll see that the audit report data starts at a time that doesn't seem reasonable - either an hour behind or perhaps a couple of hours ahead what you think the correct time should be.

This generally occurs because of the way that an XStudio, DCS or Maestro system stores the actual time of an event in the audit data file and the likelihood that you mismatched the station configuration information to the DCS or Maestro system's actual storage method.



Starting in the spring of 2007, daylight saving time (DST) start and end dates for the United States transitioned to comply with the Energy Policy Act of 2005. There have also been other related DST changes, time zone behavior, and settings for other parts of the world. Canada, for instance, also had significant changes.

These changes can have a dramatic impact on the accuracy of audit data report times. See the topic on [Time Zone Information](#) for clarification on how you might be affected.

How Audit Data Time Values are Stored

In short, an XStudio, DCS or Maestro system stores the actual event time (also called real time) in reference to GMT (Greenwich Mean Time), offset by the on-air system's time zone settings. It boils down to what time zone a given XStudio, DCS or Maestro unit "thinks" it's in, not necessarily the real time zone the system is operating within.



The GMT (Greenwich Mean Time) time reference is now more popularly known as **UTC** (Universal Time Code). For purposes of this document, they mean one and the same thing.

As an example, a DCS unit running with no time zone settings applied (via the AUTOEXEC.BAT file) "thinks" it's in the Pacific Time Zone (US) as a default. This means that if a spot (cart) plays at noon on, say, 9/21/2007, the event time is written to the audit file as an adjusted value of 7pm, 9/21/2007. This is because the time is adjusted forward 7 hours, the difference between PST & GMT (8 hours) minus 1 hour because the date, 9/21/2007, falls within Daylight Savings Time for the Pacific Time Zone. If your DCS unit is actually located in, say, the Central Time Zone (US), the audit report's actual or real time will display as 2pm, 2 hours "off" what it should be. The two-hour difference is the difference between the Central Time Zone (US) and Pacific Time Zone (US).

If your DCS unit is located in a time zone much further away from the Pacific Time Zone used in the example, the number of hours the report seems to be "off" can get very large.

With XStudio and Maestro systems, the basic time zone information is most often closer to "correct". As Maestro runs on the NT family of operating systems, most units will have had their time settings adjusted for the appropriate time zone in which the machine is located. However, Maestro documentation generally recommends that DST not be observed - that the machine's time zone settings be changed by un-checking (de-selecting) the "Automatically Adjust Clock for Daylight Saving Changes" checkbox in the operating system's Date/Time Properties dialog. In this scenario, you may find audit report information that's right during the non-daylight savings dates of the year, but "off" an hour during those dates that fall within daylight savings time.

How Does ezSuite Handle Report Times?

ezSuite is intended to provide the ability to report audit data's actual (or real) times without regard to the host PC's settings (that is, the machine on which you're running ezSuite). In order for the times to display correctly, though, you must set a given station's time zone settings, both the time zone and observe DST items, correctly. In addition, for complete accuracy, your host PC needs to have all current and historical time zone information in its registry - see the topic on [Time Zone Information](#) for additional details.

Nothing ezSuite does with audit data is destructive, so if you need to experiment with time zone settings, go ahead. Load an audit file for the station who's times seem to be "off". Then, open the [Preferences | Stations](#) tab and change the station's time zone or observe DST settings, preferably one at a time. Apply the changes and close the Preferences dialog. The data's times will be updated to reflect your new time zone settings.

5.5.1 Time Zone Information

Windows operating systems from Windows 98 forward store time zone information in the registry. Entries for each known time zone worldwide contain information such as the name, offset from GMT (UTC) and specific dates or formulas for calculating the dates that a transition from Standard Time to Daylight Saving Time (and back to Standard Time) are to occur. Not all time zones observe Daylight Saving Time.

ezSuite uses the operating system's stored time zone information to calculate time values for audit report records, specifically the "**Event Time**" (the actual time something occurred) and "**Log Time**" (log date and time that an event is scheduled to occur). When an audit report is created, ezSuite uses information from the selected station's configuration to read time zone information from the registry in order to correctly interpret the date and time information in the report.

What Changed in 2007?

Starting in the spring of 2007, daylight saving time (DST) start and end dates for the United States transitioned to comply with the Energy Policy Act of 2005. DST dates in the United States start three weeks earlier (2:00 A.M. on the second Sunday in March) and end one week later (2:00 A.M. on the first Sunday in November).

There have also been other related DST changes, time zone behavior, and settings for other parts of the world, some taking effect in 2007, while others went into effect after some versions of Microsoft operating systems went end-of-life.

How Do I Know if my Time Zone Information is Up-to-Date?

Determining whether your time zone information tables in the registry are correct and up-to-date may take a bit of effort, depending on the operating system you're using with ezSuite.

1. **Windows Vista, Windows 7 and Windows 8.** If you're using any of these operating systems, the time zone information tables in the registry are up-to-date and should require no changes unless there are changes to time zone information after their respective product releases.
2. **Windows XP.** Microsoft offered an optional download that updated all time zone information. If you ran Windows Update and selected the Time Zone Update, the registry information is up-to-date. Users also had the option of downloading a manual update tool that provides the means to update a **single** time zone at a time.
3. **Windows NT 4, Windows Me, Windows 98.** Microsoft did not offer any updates for these operating systems. A number of companies provided free tools to update the time zone information in the registry, including dcsTools.com. Depending on which tool you used, the updated information may or

may not include the means to deal with historical audit data - audit data files generated prior to 2007.



If you used a manual means to update a single time zone, the only time zone for which data created in 2007 and beyond will have correct times is the one you updated. Thus, if you are generating reports for stations that created data in time zones other than the one updated, the report times will be off, particularly in the range of dates between "old" DST dates and "new" DST dates.

Additionally, dates for 2006 and prior for **all** time zones will be off for the dates between "old" and "new" DST dates.

Manual inspection of the Windows registry to determine whether or not Dynamic DST information exists is probably the surest way to know if a PC is up-to-date. Instructions on how to perform this task are beyond the scope of this document.

What About Audit Data Generated Prior to 2007?

The introduction of new "spring forward" and "fall back" dates in many time zones in 2007 creates a problem for those who have a need to use the "old" time zone information - as ezSuite does.

To deal with the need to preserve previous time zone information, Microsoft introduced additional information for each time zone, stored in the registry as applicable. Called "**Dyamic DST**", in Windows XP and later operating systems additional information about prior years DST dates is available. In XP, this additional information is only available if you installed the Time Zone Update Microsoft offered.

If you are running Windows 98, Me, or NT4, Dynamic DST information will not be available unless you updated the time zone information with a third-party tool that includes the Dynamic DST updates. dcsTools.com made such a tool available.



If you are running an audit report for a date in 2006 or prior and do not have Dynamic DST information in the registry, the reported times will be an hour off in all days between the "old" and "new" DST switch dates. In the U.S., for instance, this means that 3 weeks of spring dates and 1 week of fall dates for all years prior to 2007 will be off one hour. It is highly recommended that for PC's running ezSuite, you install a complete time zone update package, whether it's from Microsoft (XP) or some other vendor who provides a complete update package.

5.6 Transaction and Status Codes

Transaction codes created by an XStudio, DCS or Maestro system when writing audit data, as well as the status of the transaction, are documented in Computer Concepts' DCS Audit File (.ADT) Specification, version 1.6. For ease of understanding, a table of each transaction (or action) type and status code, along with their meanings, are presented here. Extended transaction and status codes that are XStudio-specific are also documented.

Transaction Codes

Transaction codes describe the type of activity the audio delivery system is engaged in or the base type of a problem the system encountered.

<u>Displayed Transaction Code (Action)</u>	<u>Meaning</u>
PlayCart	A cart (audio file) is played.
LdRelayQ	A "relay queue" is being loaded. This differs from the standard "queue" and happens as the result of a function (action) executing.
LdRqdBrk	A Required Break is loaded into the queue.
LdBreak	An Optional Break is loaded into the queue.
DelFromQ	Items were deleted from the "queue".
RcrdCart	A cart (audio file) is being recorded.
FillCart	A fill cart is played as an automated function. These occur when DCS or Maestro automatically adds content to a break in Satellite mode, most typically.
Silence	Silence has been inserted to "spread" a break of a specified length.
AutoOn	Automation mode has been turned on.
Auto Off	Automation mode has been turned off.
RelayOn	A relay was turned on by XStudio, DCS or Maestro.
RmtPlay	A cart is played via remote control.
RmtQ	The queue has been activated/deactivated via remote control.
RmtHalt	A playing cart has been halted via remote control.
EOMBegin	The End-of-Message is beginning. Corresponds to the Aux mark on a cart.
EOMEnd	The End-of-Message is complete. Corresponds to the end of the cart.
PcToSw	Communications from the XStudio, DCS or Maestro unit to an audio switcher.
SwToPc	Communications from an audio switcher to the XStudio, DCS or Maestro unit.
DCSBegin	XStudio, DCS or Maestro is starting up.

<u>Displayed Transaction Code (Action)</u>	<u>Meaning</u>
DCSEnd	XStudio, DCS or Maestro closed.
DateErr	A date error has occurred.
cfgChngd	The DCS or Maestro configuration has been changed.
<i>XStudio-Specific</i>	
LogChngd*	A change has occurred in the broadcast log. The log was manually-edited in XStudio or updated automatically as a result of the source log changing.

Status Codes

Status codes provide documentation of what happened with a particular transaction initiated by the audio delivery system, generally reporting either success of the system action or the reason for failure of the action.

<u>Displayed Status Code</u>	<u>Meaning</u>
TXN_STARTED	An action has started that may have several components who's action results are unknown at the start of the sequence.
ok	The action completed successfully.
NOT_COMPLETED	The action was not completed.
CANCELED	The action was canceled - typically, this would refer to the playing of a cart.
IGNORED	The action was ignored. This status code is most often associated with an audio switcher input relay.
TIMED_OUT	The action could not be completed in the allocated time.
Date Conflict	A cart could not be queued or played because it was out-of-date for the date the action was attempted.
Break Missed	Typically seen when items on the log are queued but not played before the next log directive clears them from the queue. Most often seen when running in satellite mode of operation.
ManuallyForced	A cart was not valid for the date, but was forced to the play line or queue by the operator.
FailRecChInUse	A recording failed because the record channel was already in use.
FailMallocErr	The action failed because of a memory allocation error. Most often seen with DCS units.
FailCartOnPLin	The action, usually a recording, failed because the cart was on a play line at the time the action was attempted.
FailCartInQue	The action, usually a recording, failed because the cart was in the queue at the time the action was requested.

<u>Displayed Status Code</u>	<u>Meaning</u>
FailCartExists	The action failed because the cart already exists. Typically, this is seen when a recording is to be made and the recording function has been set to NOT overwrite the cart if it already exists.
Fail Disk Full	The action failed because the target hard was full. Typically, this code appears when a recording is being made and the system runs out of hard disk space.
RecAutoStarted	A recording action has started with AutoStart option set.
RecStartedNow	A recording actually began at the time indicated. An record action with AutoStart might have been "armed" several seconds (or even minutes) ago, but this is the time the recording actually began.
Rec Aptx N/A	A recording action failed because the data reduction method for the recording was apt-X and apt-X data reduction was not available on the DCS or Maestro unit attempting the recording.
RecManualStop	A recording was manually stopped.
RecAutoStop	A recording was automatically stopped based on a maximum recording length.
RecRelayStop	A recording was stopped based on an input relay received.
FailBadCartNum	The action failed because of a bad cart number.
Play Paused	A cart play was paused.
RecPaused	A recording was paused.
RecResumed	A recording was resumed from a paused state.
RecRemoteStop	A recording was stopped by remote control, using Computer Concepts' published control protocol.
Rec MPEG N/A	A recording action failed because the data reduction method for the recording was ISO-MPEG and ISO-MPEG data reduction was not available on the DCS or Maestro unit attempting the recording.
FailNoAccess	The action failed because DCS or Maestro did not have access to a required resource.
FailCartInRCW	A recording failed because the cart was already in the recording control window.
Cart Missing	An action failed because a specified cart number was missing.
<i>XStudio-Specific</i>	
AddLogItem*	An item was added to the active log in XStudio.
DelLogItem*	An active log item was deleted within XStudio.
EditLogItem*	An active log item was edited within XStudio.
LogSplice*	An updated log on disk was spliced into the active XStudio log.

5.7 Sample Printed Audit Report

When you print an audit report using ezSuite, the printed output will appear similar to the sample shown here:

Real Time	Log Time	Action	Function	Seq	CartNo	Description	Length	Agency	CustNo	Ch	Status
05:46:15		PlayCart			BUZZ		01:13.19			2	ok
05:52:53		SwToPc	Net #61			BusA Din 14		1C00400007		----	TXN_STARTED
05:52:53		SwToPc	play break			BusD Din 08		1C300100A7		----	TXN_STARTED
05:56:32		SwToPc	Net #60			BusA Din 13		1C00200027		----	TXN_STARTED
05:56:32		SwToPc	PremireLnr			BusD Din 10		1C300400AA		----	TXN_STARTED
05:56:32		PlayCart		15	PL01-08	AFTER MIDNIGHT SWEEPERS	00:08.42	BLAIR		1	ok
06:00:02		SwToPc	NET #64			BusB Din 15		1C10600037		----	TXN_STARTED
06:00:02		SwToPc	TonSelect			BusD Din 06		1C300040E6		----	TXN_STARTED
06:01:00	06:00:01	DelFromQ			ID01	LEGAL ID				----	Break Missed
06:01:00	06:00:02	DelFromQ	NEWS			News Sounder	00:18.15	**Don't Erase**		----	Break Missed
06:01:00	06:01:01	DelFromQ	0231			POWTELL	01:00.00	AVACOR	00dgS0	----	Break Missed
06:01:00	06:04:01	DelFromQ	TEAM			THE B TEAM DROPS	00:15.00			----	Break Missed
06:01:00	06:04:02	DelFromQ	(324			I SHOULD SLEEP/NE/DRIVE	02:47.61		F	----	Break Missed
06:01:00	06:09:01	DelFromQ	PR01				00:28.00		008c6b	----	Break Missed
06:01:00	06:09:02	DelFromQ	(498			I KEEP LOOKIN/SARA EVANS	03:48.82		F	----	Break Missed
06:01:00	06:09:03	DelFromQ	ATSW			ATTITUDE	00:30.00		C	----	Break Missed
06:01:00	06:09:04	DelFromQ	(C7H			Aibie/Tracy Lawrence	02:55.38			----	Break Missed
06:01:00	06:01:01	PlayCart			0231	POWTELL	01:00.00	AVACOR	00dgS0	1	ok
06:01:06		Auto Off								----	ok
06:01:06		PcToSw				SetBusA Ch 3 XxYy		140F20EFCE		----	ok
06:01:06		PcToSw				SetRowA DoulHL9876 43210		11000FDF01		----	ok
06:01:06		PcToSw				SetRowB Doul 9876 43210		111003DFFD		----	ok
06:01:07		PcToSw				SetRowB Doul 9876543210		111003DFFD		----	ok
06:03:24	06:00:01	PlayCart		3	ID01-03	LEGAL ID	00:07.90	USA		1	ok
06:03:32	06:00:02	PlayCart	NEWS			News Sounder	00:18.15	**Don't Erase**		1	ok



Audit reports are always printed in the selected printer's **landscape** orientation.

5.8 Sample Printed Log

When you print a log using ezSuite, the printed output will look similar to the example shown here (portions removed to conserve space):

Log: WCCC Merged Logs for Wed Apr 04, 2007							5/30/07 4:23:14 pm	
Time	Line	Dir	Type	Cart	Description	Length	Type	Relay
	Type	Type					Code	Cust#
								Prod
								Code
00:00	D	LR				000:00	00:05:24	
00:00:00				V999	Voice Track	000:03	E	
00:00:04				J102	KFKF Jingle - 94FM / UP	000:03	CM	
00:00:07				M59C	Thinkin' Prob/David Ball	000:48	CM	
00:00:54				V001	Voice Track Test Cart	000:12	E	
00:01:07				M50A	Cleopatra - Pam Tillis	001:22	CM	
00:02:28				J104	KFKF Jingle-Little Texas	000:03	CM	
00:02:31				M50H	What Might-Little Texas	002:47	CM	
00:05:17				J101	KFKF Jingle - Down	000:04	CM	
00:05:21				J102	KFKF Jingle - 94FM / UP	000:02	CM	
00:09	Log Note				Check Xmtr Readings			
00:10	D	LP			~ :10 Spot Break	000:00	00:07:57	
00:05:24				T501	Computer City	000:59	CM	
00:37:09				J709	KHHT - M/M	000:05	CM	
00:37:14				S702	Listen/Music-Doobie Bros	001:46	CM	
00:40	D	LP			~ :40 Spot Break	000:00	00:11:02	
00:39:00				T170	Anheuser Busch/Bud Dry	000:59	CM	
00:39:59				T508	Conte Farms - Apples	000:62	CM	
00:41:01				V001	Voice Track	000:12	E	
00:41:14				J707	KHHT - M/U	000:06	CM	
00:41:20				S706	You Ain't Seen - B T O	001:27	CM	
00:42:47				J720	KHHT - Positioning Liner	000:17	CM	
00:43:04				S701	Dreams - Fleetwood Mac	001:55	CM	
00:44:59				J708	KHHT - D/U	000:08	CM	
00:45:07				S705	China Grove-Doobie Bros	001:36	CM	
00:46:43				J706	KHHT - U/M	000:07	CM	

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Log Printed in ezSuite



Logs printed in ezSuite default to portrait orientation, but the orientation can be changed before printing. See the topic on Printing Logs for more information.

5.9 Sample Printed Reconcile Report

When you print a log reconcile report using ezSuite, the printed output will appear similar to the sample shown here:

Type	Log Time	Real Time	Status	CartNo	Description	Log Len	Actual Len	Cust No	Prod Code	Agency	Ch
Logged	07:30:01		Missed	Z002	98-9 ZED FM // THE ZED	000:02					
Logged	07:30:03	07:28:06	Date Conflict	Z008	ZED FREE CD PROMO/SPLIT	000:29					---
Logged	09:20:08	09:19:53	Date Conflict	Z008	ZED FREE CD PROMO/SPLIT	000:29					---
Logged	16:40:01	16:01:05	Cart Missing	LIVE	HOFFA'S BAR & GRILL (4.4	000:30		bbrvA			---
Logged	23:00:09		Missed	T024	BELLINI'S GJGE	001:04		bbrwyB			
Logged	23:00:10		Missed	T629	GARY MOE SATURN BY	000:09		bbxZGA			

The sample report is an example of narrowing what is printed to just the discrepancies - logged items that either were missed altogether or had a date conflict (i.e. the cart was out-of-date).



Reconcile reports are always printed in the selected printer's **landscape orientation** as a default. If you change the orientation to portrait, results may be undesirable.

Troubleshooting

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ezSuite has been designed to be as trouble-free as possible and has been thoroughly tested. However, not every usage scenario can be anticipated. This section is intended as a starting point diagnosing and solving problems, but should not be viewed as an all-encompassing source of problem resolution.

If the difficulty you're experiencing is not covered here, contact the dealer who provided you with ezSuite first. Alternatively, you can contact dcsTools.com - see the topic on [technical support](#).

Application Bugs or Errors

Bugs and errors generally fall into one of two categories - a bug, which is the application not doing something as you might have predicted it would, or; an error, which is the failure of the application to run or perform a specific task altogether.

If you find a bug, report it. Every effort is made to ensure ezSuite performs as expected, but there may be circumstances that were not predicted in the development of the software. See the section on [Technical Support](#) for information on reporting a bug.

If you encounter an error, you will get an error message indicating a severe failure and ezSuite may terminate. Provisions are made to "catch" such errors and log the error information to a file in the ezSuite application directory. The filename is **ezSuite.Elif**. Again, report any application errors you encounter. You may be asked to send the appropriate log file for analysis.

Basic Troubleshooting Steps

Before getting too far down the road in trying to find your problem, check these items to be sure your environment for running ezSuite is correct.

1. Make sure your PC (the one on which you are running ezSuite) meets the minimum hardware requirements for this application. See the section on [hardware requirements](#) for more information.
2. Make sure your PC is functioning properly. This is a broad statement, but suffice it to say that if your PC is suffering from "blue-screens" or is "locking up" for no apparent reason, the PC may be a part of the problem.
3. Ensure that the pathway to retrieving log files, and, if applicable, inventory files, is correct and "reachable" from your PC. If you are retrieving log files from a LAN (local area network), make sure you are correctly connected to the LAN and can "see" the host file server.
4. Make sure that you have a default printer assigned in your operating system. Some functions in ezSuite might fail if you have no printers defined. These problems may at first seem unrelated to printing. Some of the dialogs in ezSuite offer print capability and automatically check for a printer when the dialog is opened. Log Validation and Log Print Preview a log are examples.
5. Make sure that you have adequate hard disk storage for saving files. Normally, all log files are saved on a host file server, but you may have stored files on your local machine a result of looking at error files, then deciding to save them for posterity.

6.1 Setting Extended Logging Mode

You can force ezSuite to increase the detail level as it "tracks" what's happening within the application by setting ezSuite to run in extended event logging mode. The easiest method of increasing the event log detail level is to change your preference settings for event logging, which are located on the [Miscellaneous](#) page of the preferences dialog.

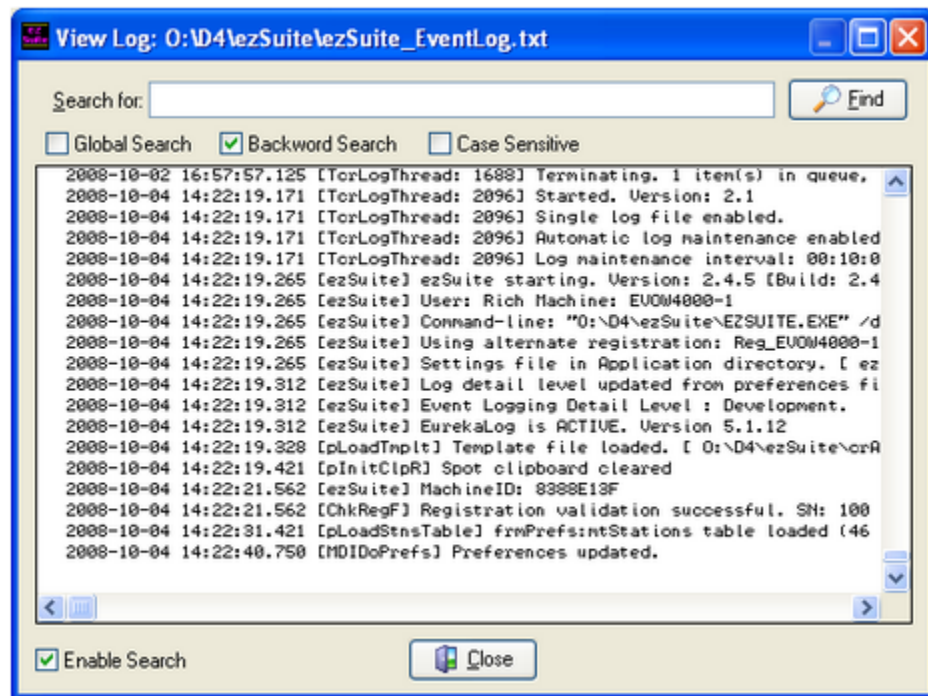
Another way to increase the detail level is to add the command-line switch **"/debug"** (no quotes) to your ezSuite shortcut. For more information on command-line switches, see the topic [Command Line Switches](#).



You can temporarily enable or disable additional application logging detail by checking or un-checking the menu item **Help | Extended Event Logging**.

Viewing the Application Event Log

When you run ezSuite, actions the program takes, along with actions you take, are recorded to a file in the ezSuite application directory. You can view the file while using ezSuite by selecting **Help | Troubleshooting | View Application Event Log**, or view it later using a standard text editor like NotePad. The application event logging file name is documented in the topic [List of Files](#). The application event log view is similar to the following:



Use the horizontal and vertical scroll bars to navigate the display. Standard **[PgUp]** and **[PgDn]** keystrokes work, too. You can search for specific text in this dialog by checking the **"Enable Search"** item, which reveals a panel for entering the text to search for, setting search direction and other options.



When viewing text, you can assign up to 10 temporary bookmarks. To assign a bookmark, use the keystroke combination **[Ctrl-Shift] + 0 to 9**. A small marker becomes visible in the left margin of the line. To jump to a bookmark, use the keystroke **[Ctrl] + 0 to 9**. Bookmarks are lost when the dialog is closed.

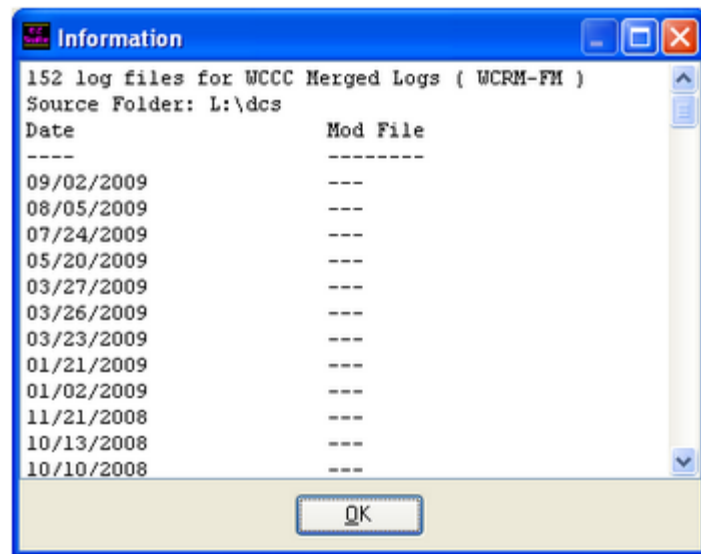
Reviewing Event Logs Outside of ezSuite

Since the ezSuite event log is a text file, you can use virtually any text editor or text file viewer to review the information. The event log file is stored in the ezSuite application folder using a naming convention of:

ezSuite_EventLog.txt

Available Broadcast Log or Audit Files

When extended event logging mode is enabled, a small graphic appears on the Open Log dialog. [Double-Click] on the graphic to display a list of all log files found for the selected station. Presence of a "mod" file is also indicated. When you view this dialog, its appearance is similar to:



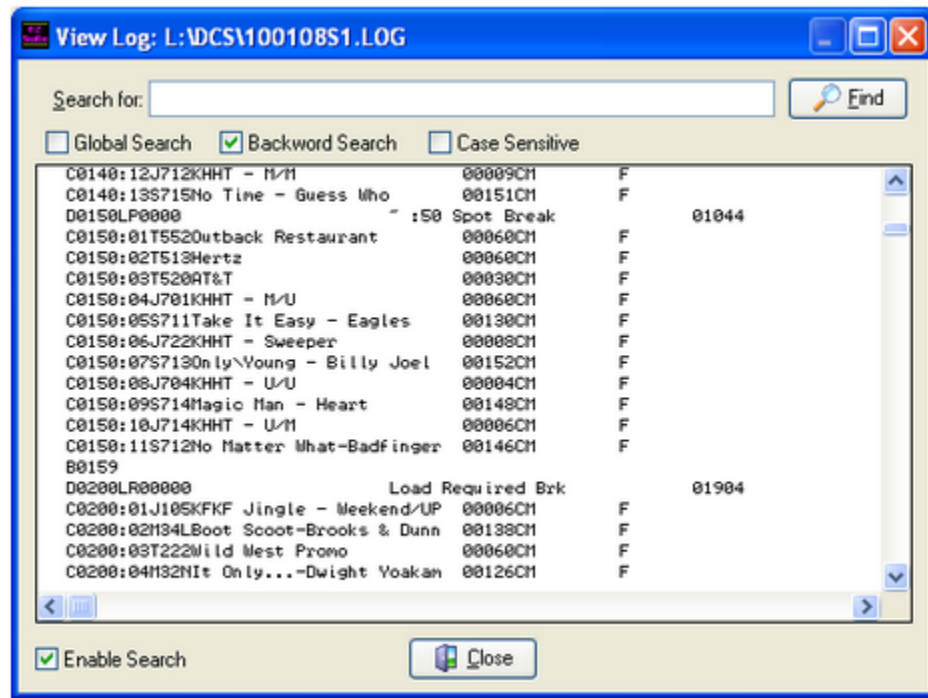
The information includes a count of log or audit files, the station to which the files are assigned, the source path of the files, and a list of of each date for which a log or audit file exists sorted in descending order. The Mod File column indicates whether or not a Maestro Voice Tracker modification file, or "mod file" exists for a given log date. When doing a log reconcile, the second column of information indicates whether or not an audit file exists for the log date.

Saving Raw Audit Data to Disk (Audit Reporting Only)

All audit records can be saved to a text file for trouble-shooting purposes. Select **Help | Troubleshooting | Dump Raw Audit Data to Disk** to save the data to a file. The file name is automatically set by ezSuite and will be saved to the application's directory. The saved file will have a name in the format **mmddyySx.dmp**, where **mm**=month, **dd**=dd, **yy**=year and **x**=station number. As you can see, this is the same format as the standard audit file name, except a different extension. See the topic [List of Files](#) for a complete list of file names that ezSuite creates and/or uses.

6.2 Viewing the Source Log File

It may be helpful to look at the original, unformatted log file you are working with. Do do so, select **Help | Troubleshooting | View Log Source File** from the main menu. The unformatted log file you loaded from disk will be displayed in a dialog similar to the example shown here:



Use the horizontal and vertical scroll bars to navigate the display. Standard **[PgUp]** and **[PgDn]** keystrokes work, too. You can search for specific text in this dialog by checking the **"Enable Search"** item, which reveals a panel for entering the text to search for, setting search direction and other options. When viewing text, you can assign up to 10 temporary bookmarks. To assign a bookmark, use the keystroke combination **[Ctrl-Shift] + 0 to 9**. A small marker becomes visible in the left margin of the line. To jump to a bookmark, use the keystroke **[Ctrl] + 0 to 9**. Bookmarks are lost when the dialog is closed.



The log file displayed in this dialog is read from the hard disk, so it will not reflect any changes you have made (and not saved) while editing the log. Also be aware that if someone else has edited the log while you are editing the log, then saved it, this dialog will display the log, as edited, by the other person.

6.3 Specific Error Messages

Here are some specific error messages you might see or situations you might encounter, their explanation and the solution.

<u>Error Message</u>	<u>Attempted Task / Solution</u>	<u>Explanation</u>
Cart Length field in a log displays the length with digits incorrectly shifted left	Opening (viewing) a log.	This occurs in two situations: 1. When a log has been edited and saved with an editor that support the 999 minute, 59 second cart length standard, then subsequently edited and saved with a log editor (CMED versions 2.3P and prior) that does not. When opened in this application or DCS, the length characters are shifted left one character, resulting in invalid cart lengths for all audio records. 2. When the user is using an old revision of LogMerge that incorrectly writes the cart length in a log.

Solution: Open the offending log in ezSuite, then update all cart lengths from the menu item **Utilities | Update Spot Records**. You can update cart length only, description only or both.



The original cart description is not affected by the described problem, but will be changed to match the matching inventory cart information if you choose to update the description when updating spot records.

Audit "Real Time" seems to be off	Loading (opening) an audit file.	There is probably a mismatch between what you think a station's time zone's settings are and what the DCS, Maestro or XStudio unit's settings really are.
-----------------------------------	----------------------------------	---

Solution: Open the Preferences dialog and change the station's time zone or observe DST settings, preferably one at a time. Apply the changes and close the Preferences dialog. The data's times will be updated to reflect your new time zone settings. See the topic [Audit Times Information](#) for a more detailed explanation of audit times.

Audit "Real Time" is off no matter what time zone settings I use.	Loading (opening) an audit file.	If you have eliminated the possibility of a mismatch between a configured station's time zone settings and the system that created the audit data file, the problem is likely related to incomplete time zone information in your PC's registry.
---	----------------------------------	--

Solution: Examine your PC's registry to verify that all current time zone information is up-to-date. See the topic [Time Zone Information](#) for more details.

Total Records & Displayed Records	Loading (opening) an audit file.	This is not necessarily a displayed error message, but you may notice that the two counts on the status bar do not
-----------------------------------	----------------------------------	--

<u>Error Message</u>	<u>Attempted Task / Solution</u>	<u>Explanation</u>
----------------------	----------------------------------	--------------------

do not match

match, even though you have "---- All Data ----" selected as the report template.

Solution: First, make sure you select the "---- All Data ----" template. If the total records count and displayed records count do not match, the problem is most likely that a portion of the audit file data has been corrupted in some way and is unreadable. The data you are seeing reflects only records that are valid. The difference between the total number of records and the displayed number of records is the number of "bad" or unrecognizable records. There is no way to fix the bad data so it can be displayed.

"Invalid Class Typecast"

Log Print or Print Preview.

When attempting to print preview a log, this message occurs. The cause is the current default printer is not available. The Print Setup dialog displays nothing for the selected printer and the Setup button is disabled.

Solution: To correct the problem, you must close ezSuite and select a different default printer.



ezSuite requires that a printer be defined in the operating system in order for any of the print functions to work properly.

Contacting dcsTools.com

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If you need to contact dcsTools.com, you can do so using one of the following methods. We are here to help, so do not hesitate to communicate with us when needed.

Mailing Address

C-R Media
8494 Saratoga Lane
Eden Prairie, MN 55347
USA

Telephone Information

Sales and Technical Support can be reached from 9:00 AM to 5:00 PM, U.S Central Time.

Voice: 952-949-9450

FAX: 952-949-9448

Email Information

To contact us via email, use our [on-line contact form](#). If you wish to use a standard email client, send correspondence to: rich@c-rmedia.com.

Technical Support

To contact technical support for our products, use the telephone numbers or email information provided above. You can also send an [on-line product-specific email](#).

Web Site

Visit our web site for information on product updates and other products we offer.

<http://www.dcsTools.com>

Appendices

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8.1 Registration

ezSuite requires a valid registration code to enable full use of the product. If you purchased ezSuite, you should have received a registration code or instructions on how to obtain your registration code with your installation materials. The registration code contains the product serial number and is unique to each PC on which ezSuite is installed.

If no registration code is entered or available, you will be able to run ezSuite, but will be unable to save an edited log, print a log, print or save audit reports, print or save log reconcile reports, or print or save log validation reports.

Enter registration information by selecting **Help | Register** from the main menu. You'll be presented with a dialog similar to the following:

The image shows a Windows-style dialog box titled "Product Registration" with a blue header bar. Inside the dialog, the title "ezSuite Registration" is centered in a large, bold, blue font. Below this, there are two text input fields. The first is labeled "Licensed To (Company Name):" and the second is labeled "Registration Code:". Below these fields is a section titled "Registration Information" in bold blue font, which currently displays the text "Not registered." in a smaller blue font. At the bottom of the dialog, there are three buttons: "Save" with a key icon, "Cancel" with a red X icon, and "Help" with a question mark icon.

Enter the company name and/or call letters in the "**Licensed To**" field. Then, enter the code you were supplied with in the "**Registration Code**" field. If you received the registration code electronically, you may use standard Windows cut and paste methods to paste the code in the field. After entering the information, click on the [**Save**] button to save the information.

After you have completed registration initially, if you re-display this dialog, your registration specifics will be displayed in the **Registration Information** panel.



If you wish to change your company name and/or call letters at a later date, you will need to re-enter the registration code. **Do NOT save the registration information without a valid registration code entered!**

8.2 List of Files

When ezSuite is installed, a number of files are placed on your computer. As ezSuite is used, other files are generated. Below is a table of files, their locations, and usage.

Note: *AppDir* is the drive and folder location where you installed ezSuite.

<u>File</u>	<u>Location</u>	<u>Usage</u>
ezSuite.exe	<i>AppDir</i>	The main program file.
ezSuite.chm	<i>AppDir</i>	The on-line help file.
ezSuite_EventLog.txt	<i>AppDir</i>	This text file is created and appended to as you use the application. It contains information about application activity.
ezSuite.ini	<i>AppDir</i>	Preferences file that contains user-defined preferences, including station configurations and cart filters.



Beginning with version **2.0.0** of ezSuite, the preferences file is located in the application folder. Prior versions' preferences file was located in the Windows folder.

crAudit.afb	<i>AppDir</i>	The audit template file. User-created templates are stored in this data file.
mmddyySx.dmp	<i>AppDir</i>	A raw data text dump of an audit report (Extended Event Logging Mode only). This file can be created by the user on-demand. The filename syntax is mm =month, dd =day, yy =year, x =station number. The file name is the same as the original audit file, except for the file extension.
crAuditMDViews.xml	<i>AppDir</i>	An XML file that contains the custom data view layouts for Multi-Day audit reports.
crAuditViews.xml	<i>AppDir</i>	An XML file that contains the custom data view layouts for standard audit reports.
*.CCF	<i>AppDir</i>	Sample cart category files. The files include category name, colors and cart masks. The contents can be imported in Preferences Cart Categories .
*.LCF	<i>AppDir</i>	Sample log display property files. The files include settings for log font and non-audio item colors. The contents can be imported in Preferences User Interface .
ezSuiteDebug.txt	<i>AppDir</i>	No longer used. Replaced by ezSuite_EventLog.txt.



Some ezSuite installations include additional documentation files. These files are typically PDF files and are placed in the application folder. Additional documentation files may include an on-disk Operations Manual and Quick Start Guide.

8.3 Command-Line Switches

ezSuite provides for the use of a minimal number of command-line switches that can be implemented as needed. These switches can be entered in any order and are not case-sensitive. To add a command-line switch, modify the ezSuite shortcut. Add the switch (as documented below), separating each switch with a space.

Note: You must have a space between the end of the executable (program) name and the first command-line switch.

An example command-line switch would look like: **C:\dcsTools\ezSuite\ezSuite.exe /debug**

Available Command-Line Switches

Switch	Usage
/Debug	This command-line switch enables additional tracking of information during application execution. ezSuite will add a menu item (Help Troubleshooting View Application Event Log) to the main display, which is used to view this additional information. See the section on Setting Extended Logging Mode for more information.

Discontinued Switches

1. The **"-T"** switch, which invoked special, fault-tolerant handling of a log file, is no longer useful. Current versions of ezSuite automatically handle malformed log records that this switch helped overcome.
2. The **"/LAN"** switch, which forced the ezSuite preferences file to be located in the application folder. Beginning with ezSuite version **2.0.0**, the preferences file is always located in the application folder. The change from the original location, the Windows folder, was made to accommodate increased security functionality in Windows XP and later operating systems.

8.4 Generic Log File Specification

The Generic Log File Specification documents the file naming convention and record structure for logs created for use with XStudio, DCS and Maestro radio automation systems.



This specification was originally published by Computer Concepts Corporation, Lenexa, KS in 1989 and updated to version 1.5 in October 1991. The specification was released to all interested parties, including traffic system vendors and music scheduling system vendors.

This document (the one you are reading) is referred to as:

dcstools Generic Log File Specification Version 1.6 (Updated 6/28/2010)

It updates and corrects errors in version 1.5 of the specification published by Computer Concepts Corporation.

Log File Structure

The Generic Log File is made up of 69-byte records terminated with a Carriage Return (byte 68) and Line Feed (byte 69).

The first record in the file is an informational record ([ID Record](#)) not displayed in the audio delivery system.

All other records include a time field of 4 characters representing military time in hours and minutes, on which the file is sorted. In addition, [Commercial Records](#) contain a seconds value field. The time field, including the seconds value field where applicable, must be a unique value for each record, in the range of 00:00:00 to 23:59:59. The log has a maximum of 86,400 records, based on unique time values with one-second resolution.



The original Computer Concepts specification document indicated that the maximum number of records for a log file is **1441**. While this number is correct when considering the number of minutes in a day (1440) plus one ID Record, in reality the actual maximum number of records is 86,400 when you consider [Commercial Records](#) that contain a seconds value.

Each log file represents one (1) day of programming, 24 hours in length, beginning at midnight and finishing at 11:59:59 PM.

It is not required that a log file contain content for all hours of the day (i.e. records with time fields starting at midnight and ending at 11:59 PM), but the log must not contain content for more than one day. As an example, if the station for which the log is prepared operates between 5 AM and 8 PM only, it is perfectly acceptable that the log file contains content for those hours only.

A typical log, viewed in a standard text editor, might look similar to the example fragment:

```
I          WXST-FM
D0000LR00300          Load Required Brk
C0000:01T004DIET COKE/Q:Diet Coke!      00059CM
C0000:02T010VERNE & BUBBA'S DONUT        00049CM
C0000:03T110DoubleTree                    00058CM
D0020LR00400          Load Required Brk
C0020:01T118Get Well Games                 00059CM
C0020:02T120DENTYNE/reg or sugarfree      00029CM
```

Additional information regarding what the host system expects to see in the finished generic log is

contained in the topic [Generic Log Construction Guidelines](#).

Log File Name

Log files are named in such a way as to provide for one unique file for each day of each year for each station. This allows usage of a single file folder location for all stations in a multi-station environment.

Log file names have the form **MMDDYYxx.LOG**, where:

- MM** = Month (01-12)
- DD** = Day (01-31)
- YY** = Year (00-99)
- xx** = Station Number (any 2 characters in 0..9, A..Z)
- .LOG** = The log file extension

Generic Record Type

All records have a record type value in byte 1 of the record. Bytes 2-67 will vary in format, depending on the record type. All records terminate with a Carriage Return/Line Feed combination in bytes 68 and 69.

Bytes	Len	Description	Possible Values
01	1	Record Type	B = Blank Line C = Commercial D = Directive I = ID Record L = Log Note P = Program Title
02-67	66	< Format depends on record type >	
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

Record Type Conventions

All record types defined are presented in tabular form and include the byte positions for each field, length of each field, a description of the field and possible values for the field. Here are the conventions used in documenting record types:

- All fields in a record are fixed-length. If the field is not completely filled with information, it must be padded with space characters (Decimal 32, Hex 20) to the full length of the field to ensure correct byte alignment. Unless otherwise noted, all fields are left-justified.
- In the possible values column, text marked in **BOLD** are acceptable field values; all other text is descriptive in nature.
- The terms *Blanks* and *Blank* are used in the possible values column to identify fields or reserved areas of the record that are to be populated with the space character (Decimal 32, Hex 20).



Original versions of Computer Concepts Corporation documentation specified some fields should be "padded with nulls," meaning using the null character (Decimal 0, Hex 00) to fill unused byte positions at the end of the field. Over time, the accepted method became filling the unused byte positions with the space character (Decimal 32, Hex 20).

- The term *Freeform* is used in the possible values column to indicate that the field value can be standard text of your choosing (i.e. freeform) up to the maximum length of the field.
- Some fields in the [Commercial Record](#) are noted in the possible values column as **Filled in by system** or **<Not Used>**. These fields should be output filled with blanks (Decimal 32, Hex 20).

8.4.1 ID Record Type

One and only one (1) ID Record must be placed as the first record in a log file.

Bytes	Len	Description	Possible Values
01	1	Record Type	I = ID Record
02-12	11	<Reserved>	Blanks
13-19	7	Station ID	XXXX-XM
20-67	48	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

8.4.2 Commercial Record Type

The commercial record type is used to identify audio items that appear on the log.

Bytes	Len	Description	Possible Values
01	1	Record Type	C = Commercial
02-05	4	Time in HHMM format	0000 - 2359
06-08	3	Seconds in :SS format	:00 - :59 (see Guidelines for additional info)
09-12	4	Cart Number	4 alphanumeric characters
13-36	24	Log Description	Freeform
37-38	2	Commercial Play Priority	Freeform
39-43	5	Length in MMMSS	00000 - 99959 (Right-Justified)
44-47	4	Commercial Type	Has evolved to freeform. Original suggested types include: AGR - Agriculture CM - Commercial EDIT - Editorial EDUC - Educational E - Entertainment I - Instructional N - News O - Other PA - Public Affairs POL - Political PRO - Promotional PSA - Public Service Ann. R - Religious S - Sports
48-53	6	Customer Number	Freeform
54	1	Position Flag	F = 1st in break L = Last in break Blank = not fixed
55	1	Make Good Flag	Filled in by system.
56-59	4	Product Code	Freeform
60-67	8	Time Aired	Filled in by system. Maestro places voice track modification information in this field.
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

8.4.3 Directive Record Type

The directive record type is used to communicate special directions to XStudio, DCS and Maestro, hence the term "directive". There are six (6) specific directives, each with its own record format.

Base Directive Record Type

The first 7 bytes of a directive record are formatted in three (3) fields, as shown. The remaining 62 bytes differ based on the value of the Directive Type field (bytes 6 & 7).

Bytes	Len	Description	Possible Values
01	1	Record Type	D = Directive
02-05	4	Time in HHMM format	0000 - 2359
06-07	2	Directive Type	CR - Close Relay LW - Load Window LP - Load Play Stopset LR - Load Required Stopset LS - Load Optional Stopset PC - Play Cart
08-67	60	Directive Type dependent	See individual directive types
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

Close Relay Directive

This type of directive is used to execute XStudio Actions or DCS and Maestro functions.

Bytes	Len	Description	Possible Values
01	1	Record Type	D = Directive
02-05	4	Time in HHMM format	0000 - 2359
06-07	2	Directive Type	CR - Close Relay
08-11	4	Relay Number	0001-9999 XStudio, Maestro 01-99 DCS (left-justified)
12-31	20	<Reserved>	Blanks
32-61	30	Description	Freeform
62-67	6	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

Load Window Directive

This directive is used to update the content of certain XStudio Actions and DCS or Maestro functions.

Bytes	Len	Description	Possible Values
01	1	Record Type	D = Directive
02-05	4	Time in HHMM format	0000 - 2359
06-07	2	Directive Type	LW - Load Window
08-11	4	Relay Number	99 Current Voice (All) 0001-9999 Maestro 01-99 DCS (left-justified)
12-31	20	<Reserved>	Blanks
32-61	30	Description	Freeform
62-67	6	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

Load Stopset Directive

These directive types are the most commonly used of the directives. They are used to mark break positions and duration. Note there are three (3) types, all with the same record format.

Bytes	Len	Description	Possible Values
01	1	Record Type	D = Directive
02-05	4	Time in HHMM format	0000 - 2359
06-07	2	Directive Type	LP - Load Play Stopset LR - Load Required Stopset LS - Load Optional Stopset
08-12	5	Length in MMMSS	00000 - 99959 (Right-Justified)
13-31	19	<Reserved>	Blanks
32-60	29	Description	Freeform
61-67	7	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

Play Cart Directive

This directive is used to place an audio item in the log that is not normally scheduled by a music or traffic system.

Bytes	Len	Description	Possible Values
01	1	Record Type	D = Directive
02-05	4	Time in HHMM format	0000 - 2359
06-07	2	Directive Type	PC - Play Cart
08-12	5	Length in MMMSS	00000 - 99959 (Right-Justified)
13-16	4	Cart Number	4 alphanumeric characters
17-20	4	Commercial Type	Same as Commercial Record
21-27	7	<Reserved>	Blanks
28-31	4	Product Code	Freeform
32-60	29	Description	Freeform
61-66	6	Customer Number	Freeform
67	1	<Reserved>	Blank
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

8.4.4 Program Title Record Type

The program title record type is used to identify programs on the log.

Bytes	Len	Description	Possible Values
01	1	Record Type	P = Program Title
02-05	4	Time in HHMM format	0000 - 2359
06-36	31	Description	Freeform
37-41	5	Length in MMMSS	00000 - 99959 (Right-Justified)
42-43	2	<Reserved>	Blanks
44-47	4	Program Title Type	Same as Commercial Record Commercial Type
48-67	20	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

8.4.5 Log Note Record Type

As the name implies, the log note record type is used for placing notes on the log.

Bytes	Len	Description	Possible Values
01	1	Record Type	P = Program Title
02-05	4	Time in HHMM format	0000 - 2359
06-29	24	Log Note	Freeform
30-67	38	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

8.4.6 Blank Record Type

The blank record type was not originally documented by Computer Concepts Corporation. It has been used, though, since the early 1990's.

Bytes	Len	Description	Possible Values
01	1	Record Type	B = Blank Line
02-67	67	<Reserved>	Blanks
68-69	2	CR/LF	Carriage Return/Line Feed
Total	69		

8.4.7 Generic Log Construction Guidelines

In order for the generic log to be properly executed by the host audio system, certain guidelines need to be followed in constructing and/or exporting the log. This topic provides basic guidelines intended to ensure that the generic log executes properly on the host system.



The original specification published by Computer Concepts Corporation, Lenexa, KS, did not include log construction guidelines. This content is provided to minimize pitfalls that might be encountered in constructing and/or exporting a generic log for use by the host audio system.

Each Log Must Contain an ID Record

The **first record** in the generic log file must be an informational record ([ID Record](#)) in order to be considered valid. If the ID Record is not present, the log will not be processed by the host audio system.

Audio Items (Spots, Music etc) Must be "Anchored"

When loading the generic log, the host audio system uses non-audio log records as anchor points for the the audio items. Typically, a [Directive](#) record type is used, but [Program Title](#) and [Log Note](#) records can also be used. The host system groups the audio items following the anchor as a sequence based on the anchor item's time value. Consider the following fragment of a generic log file:

```
...
D0020LR00400          Load Required Brk <== "Anchor Point"
C0020:01T118Get Well Games          00059CM
C0020:02T120DENTYNE/reg or sugarfree 00029CM
D0100LR00300          Load Required Brk <== "Anchor Point"
C0100:01T004DIET COKE/Q:Diet Coke!  00059CM
C0100:02T010VERNE & BUBBA'S DONUT    00049CM
C0100:03T110DoubleTree              00058CM
...
```

As you can see in the fragment, a [Directive](#) is scheduled at 00:20 (12:20 AM). The following audio items (commercials in this case) have the same starting times in terms of hour and minute (12:20 AM) and contain a seconds value. The two commercials in the example are "anchored" to the Directive. The next grouping is at 01:00 (1:00 AM). The host system typically creates "spacing" so the visual representation of the log appears similar to an original paper log document.

This concept of anchoring is particularly important if the host system is running satellite automation. The [Directive](#) "anchors" have the effect of grouping the breaks (stopsets) for playback when the programming service signals a local breakaway.

In live programming segments, using one of the record types that serves as a content anchor assists in making the log visualization on the host system easier to use.

Audio Items (Spots, Music etc) Must be Written in One-Second Increments

While it may be counterintuitive, audio items following an anchor item in the generic log need to be incremented by one second for each item following the [Directive](#), [Program Title](#) or [Log Note](#). The main reason for this requirement is to maximize the number of elements a log contains.

Since the generic log structure uses the time values as [unique record identifiers](#), incrementing by one second increases the number of records that can be contained within the generic log substantially. Review the generic log file fragment to see how this construction appears in the file:

```
...  
D0020LR00400          Load Required Brk <== "Anchor Point"  
C0020:01T118Get Well Games      00059CM    <== Item incremented 1 second  
C0020:02T120DENTYNE/reg or sugarfree 00029CM    <== Item incremented 1 second  
C0020:03T010VERNE & BUBBA'S DONUT  00049CM... <== Item incremented 1 second  
...
```

Simply passing a traffic or music scheduling system "log time" through to the generic log file is the most common pitfall encountered when constructing and/or exporting a log. If the log times are not adjusted and properly incremented, the results on the host audio system are unpredictable.

ezSuite compensates for this problem when opening a log by automatically adjusting the times to meet the log file specification. If there is a problem making the adjustments, ezSuite will warn the end-user of the problems.

8.5 Audit File Specification

The Generic Audit File Specification documents the file naming convention and record structure for audit data files created by XStudio, DCS and Maestro audio delivery systems.



This specification was originally published by Computer Concepts Corporation, Lenexa, KS in 1989 and updated to version 1.6 in October 1992. The specification was released to all interested parties, including traffic system vendors and music scheduling system vendors.

This document (the one you are reading) is referred to as:

dcsTools Audit File Specification Version 1.7 (Updated 12/17/2012)

It updates version 1.6 of the specification published by Computer Concepts Corporation, including later additions to audit transaction types and status codes, along with items unique to dcsTools products.

Audit File Name

Audit files are named in such a way as to provide for one unique file for each day of each year for each station. This allows usage of a single file folder location all stations in a multi-station environment.

Audit file names have the form **MMDDYYxx.ADT**, where:

MM = Month (01-12)

DD = Day (01-31)

YY = Year (00-99)

xx = Station Number (any 2 characters in 0..9, A..Z)

.ADT = The audit file extension

Audit File Structure

The audit file data is stored in binary format as a group of records. Each record has a [fixed length segment](#) followed by a fixed number of [variable length fields](#).



Where possible, descriptive names that match the originally-published specification have been retained. New types added use naming conventions similar to the original documentation.

8.5.1 Fixed Length Segment

The fixed length segment of an audit record includes information about when the event occurred, the type of event, the length of the event, and status of the event. The table describes the structure and field usage.

Field	Data Type (C)	Description
eventTime	time_t	The time the event occurred. "time_t" is Microsoft's C compiler v6.0A definition of the number of seconds since 00:00:00 January 1, 1970. It is a 4-byte signed integer.
txnType	auditTxnTypeEtyp	An enumerated type that describes the type of transaction. See the topic Transaction Types for details.
logTime	time_t	If applicable, the log time of the event. Otherwise, the value will be zero. "time_t" is Microsoft's C compiler v6.0A definition of the number of seconds since 00:00:00 January 1, 1970. It is a 4-byte signed integer.
length	long	The event length in centiseconds. A length of 30.05 seconds is expressed as 3005. If the event has no applicable length, the value will be zero.
status	audtTxnStatEtyp	An enumerated type that describes the status of the transaction. See the topic Status Types for details.
seqNum	Byte	If the event relates to the play of a multi-cut cart, this field contains the cut rotation sequence number. Otherwise, the value will be zero.



The eventTime and logTime field values are stored by the audio delivery system based on the Pacific Time Zone. When calculating the actual event time and log time, the actual time zone in which the record was created by the audio delivery system needs to be taken into account in order to arrive at the correct date and time value.

8.5.1.1 Transaction Types

The transaction type variable is an enumerated type. Transaction type codes describe the type of activity the audio delivery system is engaged in or the base type of a problem the system encountered.

<u>Enumerated Transaction Type</u>	<u>Displayed Transaction Code (Action)</u>	<u>Meaning</u>
AUDIT_PLAY	PlayCart	A cart (audio file) is played.
LOAD_WINDOW	LdRelayQ	A "relay queue" is being loaded. This differs from the standard "queue" and happens as the result of a function (action) executing.
LOAD_STOP_SET_REQ	LdRqdBrk	A Required Break is loaded into the queue.
LOAD_STOP_SET	LdBreak	An Optional Break is loaded into the queue.
CANCEL_Q_ELEMENT	DelFromQ	Items were deleted from the "queue".
AUDIT_RECORD	RcrdCart	A cart (audio file) is being recorded.
FILLER_SELECTION	FillCart	A fill cart is played as an automated function. These occur when DCS or Maestro automatically adds content to a break in Satellite mode, most typically.
SILENCE_INSERTED	Silence	Silence has been inserted to "spread" a break of a specified length.
SET_AUTO_ON	AutoOn	Automation mode has been turned on.
SET_AUTO_OFF	Auto Off	Automation mode has been turned off.
RELAY_EVENT	RelayOn	A relay was turned on by XStudio, DCS or Maestro.
REMOTE_PLAY	RmtPlay	A cart is played via remote control.
REMOTE_QUEUE	RmtQ	The queue has been activated/deactivated via remote control.
REMOTE_HALT	RmtHalt	A playing cart has been halted via remote control.
EOMB	EOMBegin	The End-of-Message is beginning. Corresponds to the Aux mark on a cart.
EOME	EOMEnd	The End-of-Message is complete. Corresponds to the end of the cart.
MSG_XMIT_TO_SW	PcToSw	Communications from the XStudio, DCS or Maestro unit to an audio switcher.
MSG_RCV_FROM_SW	SwToPc	Communications from an audio switcher to the XStudio, DCS or Maestro unit.

<u>Enumerated Transaction Type</u>	<u>Displayed Transaction Code (Action)</u>	<u>Meaning</u>
DCS_STARTED	DCSBegin	DCS or Maestro is starting up.
DCS_EXITED	DCSEnd	DCS or Maestro closed.
TT_DATE_FRAME	DateErr	A date error has occurred.
TT_NEW_CFG	cfgChngd	The DCS or Maestro configuration has been changed.
<i>dcstools-Specific</i>		
TT_LOG_CHANGE	LogChngd*	A change has occurred in the broadcast log. The log was manually-edited in XStudio or updated automatically as a result of the source log changing.

8.5.1.2 Status Types

The status type variable is an enumerated type. Status codes provide documentation of what happened with a particular transaction initiated by the audio delivery system, generally reporting either success of the system action or the reason for failure of the action.

<u>Enumerated Status Type</u>	<u>Displayed Status Code</u>	<u>Meaning</u>
TXN_STARTED	TXN_STARTED	An action has started that may have several components who's action results are unknown at the start of the sequence.
COMPLETED	ok	The action completed successfully.
NOT_COMPLETED	NOT_COMPLETED	The action was not completed.
CANCELLED	CANCELED	The action was canceled - typically, this would refer to the playing of a cart.
IGNORED	IGNORED	The action was ignored. This status code is most often associated with an audio switcher input relay.
TIMED_OUT	TIMED_OUT	The action could not be completed in the allocated time.
TS_DATE_CONFLICT	Date Conflict	A cart could not be queued or played because it was out-of-date for the date the action was attempted.
BREAK_MISSED	Break Missed	Typically seen when items on the log are queued but not played before the next log directive clears them from the queue. Most often seen when running in satellite mode of operation.
TS_MANUAL_FORCE	ManuallyForced	A cart was not valid for the date, but was forced to the play line or queue by the operator.
TS_REC_FAIL_CH_IN_USE	FailRecChInUse	A recording failed because the record channel was already in use.
TS_REC_FAIL_MALLOC_ERR	FailMallocErr	The action failed because of a memory allocation error. Most often seen with DCS units.

<u>Enumerated Status Type</u>	<u>Displayed Status Code</u>	<u>Meaning</u>
TS_REC_FAIL_CART_ON_PLINE	FailCartOnPLin	The action, usually a recording, failed because the cart was on a play line at the time the action was attempted.
TS_REC_FAIL_CART_IN_QUE	FailCartInQue	The action, usually a recording, failed because the cart was in the queue at the time the action was requested.
TS_REC_FAIL_CART_EXISTS	FailCartExists	The action failed because the cart already exists. Typically, this is seen when a recording is to be made and the recording function has been set to NOT overwrite the cart if it already exists.
TS_REC_FAIL_DISK_FULL	Fail Disk Full	The action failed because the target hard was full. Typically, this code appears when a recording is being made and the system runs out of hard disk space.
TS_REC_AUTO_START	RecAutoStarted	A recording action has started with AutoStart option set.
TS_REC_START_NOW	RecStartedNow	A recording actually began at the time indicated. An record action with AutoStart might have been "armed" several seconds (or even minutes) ago, but this is the time the recording actually began.
TS_REC_APTX_NA	Rec Aptx N/A	A recording action failed because the data reduction method for the recording was apt-X and apt-X data reduction was not available on the DCS or Maestro unit attempting the recording.
TS_REC_MANUAL_STOP	RecManualStop	A recording was manually stopped.
TS_REC_AUTO_STOP	RecAutoStop	A recording was automatically stopped based on a maximum recording length.
TS_REC_RELAY_STOP	RecRelayStop	A recording was stopped

<u>Enumerated Status Type</u>	<u>Displayed Status Code</u>	<u>Meaning</u>
		based on an input relay received.
TS_REC_FAIL_BAD_CARTNUM	FailBadCartNum	The action failed because of a bad cart number.
TS_PAUSED	Play Paused	A cart play was paused.
TS_REC_PAUSED	RecPaused	A recording was paused.
TS_REC_RESUMED	RecResumed	A recording was resumed from a paused state.
TS_REC_REMOTE_STOP	RecRemoteStop	A recording was stopped by remote control, using Computer Concepts' published control protocol.
TS_REC_MPEG_NA	Rec MPEG N/A	A recording action failed because the data reduction method for the recording was ISO-MPEG and ISO-MPEG data reduction was not available on the DCS or Maestro unit attempting the recording.
TS_REC_FAIL_NO_ACCESS	FailNoAccess	The action failed because DCS or Maestro did not have access to a required resource.
TS_REC_FAIL_CART_IN_RCW	FailCartInRCW	A recording failed because the cart was already in the recording control window.
TS_CART_MISSING	Cart Missing	An action failed because a specified cart number was missing.
<i>dcstools-Specific</i>		
TS_LOG_ADD	AddLogItem*	An item was added to the active log in XStudio.
TS_LOG_DEL	DelLogItem*	An active log item was deleted within XStudio.
TS_LOG_EDIT	EditLogItem*	An active log item was edited within XStudio.
TS_LOG_SPLICE	LogSplice*	An updated log on disk was spliced into the active XStudio log.

8.5.2 Variable Length Segment

The variable length segment of the audit record includes 6 ASCII fields delimited by a byte having a value of **0xFF** (decimal 255). The table below lists the field order and their possible lengths.

<i>Field</i>	<i>Data Type</i>	<i>Description</i>
cartNumber	AnsiChar [8]	The cart number field. If the transaction involves a cart (audio item), the cart number will be in this field. Otherwise, the field will be empty.
custNum	AnsiChar [7]	Customer number field. If the transaction involves a log item and a customer number was included in the log, that value appears in this field. Otherwise, the field will be empty.
description	AnsiChar [25]	Description field. If the transaction involves a cart (audio item), the description of the item appears in this field. If the transaction is of another type, text appearing in this field could be a decoded switcher message or information about an automated function or action.
agencyTapeNum	AnsiChar [16]	Agency tape number field. If the transaction involved a log item and an agency number was included in the log, that value appears in this field. Otherwise, the field would include raw switcher data for an audio switcher transaction or be empty.
switcherMsg	AnsiChar [11]	Switcher message field. If the transaction involves an audio switcher, the data in this field represents the switcher command type and result.
windowName	AnsiChar [14] (Original) AnsiChar [30] (dcsTools)	Window name field. Originally 14 characters in length, expanded to 30 for dcsTools products. If the transaction involves an automation function or action, its name appears in this field. For XStudio, if the transaction involves a log item, the unique log record ID appears in this field. Otherwise, the field is empty.

All text stored in the variable length segment of the audit record is ANSI text. This convention has been retained for compatibility across all audio delivery systems that write records described in this document.

8.6 Revision History

This topic contains historical information on changes, enhancements and corrections to ezSuite by version number and date. For the most recent changes and enhancements, see the [What's New](#) topic.

Version 2.7.0.120 - 02/12/2013

1. **Enhancement.** Log display times can now be shown as AM/PM times if desired. As a default, ezSuite continues to display log times in military format. To enable AM/PM time display, use the main menu item **View | Show Log Time as AM/PM**. When enabled, printed logs also reflect AM/PM times.
2. **Enhancement.** The ezSuite user interface has been updated to improve general appearance.
3. **Enhancement.** ezSuite now detects Windows 8 and Windows Server 2012 operating systems and adjusts its display accordingly.
4. **Fix.** When a user attempted to register ezSuite by copying and pasting the registration key into the registration dialog, the registration key would be invalid because the user inadvertently copied leading spaces instead of just the registration key text. Now, any extraneous spaces are removed when the user pastes the registration key into the dialog. Additional feedback is provided when manually entering a registration key that is not the correct length, which can occur if a character is missed in typing or if copying only a portion of the registration key and pasting it.
5. **Fix.** When calculating an audio segment length, if the last segment on the log had no audio, the value (zero) was not displayed. This has been corrected.
6. **Fix.** Very occasionally, when ezSuite was creating a temporary file to store information for display, the temporary file was not correctly created and the information would not be displayed. The problem has been corrected.

Version 2.6.0.80 - 02/05/2010

1. **Enhancement.** ezSuite now reports the host operating system in more detail and has been updated to reflect the release of Windows 7.
2. **Enhancement.** Application icons for ezSuite have been updated.
3. **Enhancement.** ezSuite is now aware of multiple monitor host systems and properly saves and restores its position on the correct monitor.
4. **Fix.** A problem validating logs containing lower-case cart numbers has been corrected.
5. **Fix.** The pop-up menu associated with log editing no longer allows users to attempt to copy a spot record when the log is newly-created and has no valid records to copy.
6. **Fix.** The switcher status display dialog used with audit reports is now restored on next use to the correct screen location. Previously, user placement of the dialog was not remembered from session to session.

Version 2.5.0.79 - 08/07/2009

1. **Enhancement.** This version of ezSuite introduces an all-new Preferences dialog. The preferences area has been completely redesigned, featuring a more logical organization of settings that is easier to use and understand. Some additional properties have been introduced, including control over application event logging detail and maximum size. See the [Configuration](#) section for more details.
2. **Enhancement.** A default station can now be assigned. When a default station is assigned, it is selected when a log, audit report or log reconcile window is initially displayed.

3. **Enhancement.** When importing cart categories (cart masks), the imported categories can now be optionally appended to the existing categories.
4. **Enhancement.** The Open Log/Audit dialog has been updated for better performance when working with a station with a large number of available files.

Version 2.4.6.76 - 03/23/2009

1. **Enhancement.** Inventory information is now automatically refreshed when a log's associated inventory file changes. This ensures the user is always working with the most current available inventory information. Previously, the inventory data was loaded when a log was opened and not updated until another log was opened.
2. **Enhancement.** Handling of malformed logs has been improved. Specifically, it has been observed that traffic logs produced by Wide Orbit occasionally contain invalid records, both under-sized and over-sized as a result of incorrect padding of the log record. If invalid log records cannot be handled, a message is displayed and the user can optionally view the log records that could not be processed.
3. **Enhancement.** The ezSuite main status bar has been updated with better-quality graphics and better visual appearance.
4. **Fix.** If a user minimized ezSuite and either rebooted the PC or logged out, the next time time ezSuite was launched, it would either show up on the task bar (minimized) or disappear altogether. In reality, the program was running, but the user could not see it. Now, ezSuite will not restore itself to a minimized state on startup.
5. **Fix.** Additional checks are now made when loading an inventory data file to better deal with errors in opening or reading the data file.
6. **Fix.** When previewing a printed inventory report on-screen, context help would be inadvertently triggered if the user used [**Right-Click**] to reduce the size of the previewed information. Context help is now suppressed in the print preview displays.
7. **Fix.** ezSuite would not launch on operating systems older than Windows 2000. This included Windows 98, Windows Me and Windows NT4. The problem was introduced in version 2.4.5 and has been resolved.

Version 2.4.5.75 - 10/04/2008

1. **Enhancement.** A number of dialogs have been updated to be more visually consistent in the XP and Vista operating systems. Included are the registration, machine ID, password and about ezSuite dialogs.
2. **Fix.** If a user manually edited the ezSuite preferences file and changed a station number to a single-digit value or a value of more than 2 digits, ezSuite would not correctly find an audit file for a given station date. This scenario is now correctly handled, although manual entries of more than 2 digits are truncated to the first two characters.
3. **Fix.** When appending an item to a log and the last item on the log had a time of 23:59, ezSuite would allow an attempt to add a log record that requires a log time one minute later than the last item, creating an invalid log time of 24:00. Now, only items that can be appended to the log after 23:59 are allowed. These items are spot (cart) records and open avails.
4. **Fix.** If a user-defined log type was entered in dialogs that contain a log type, the manually-entered log type was not being limited to the 4-character maximum. Now, a user's manual entry is truncated to 4 characters if it is longer than is allowed.
5. **Fix.** A Play Cart Directive's product code and customer number information is now properly displayed on the log, if present in the log record.

6. **Fix.** If the host PC has more than 2GB RAM installed, the reported amount of available RAM was incorrect. On PC's running Windows 2000, XP and Vista, the correct amount of RAM is now displayed.
7. **Fix.** When previewing a printed report on-screen, context help would be inadvertently triggered if the user used **[Right-Click]** to reduce the size of the previewed information. Context help is now suppressed in the print preview displays.

Version 2.4.4.72 - 07/03/2008

1. **Enhancement.** A keyboard shortcut to "**Save Log As**" has been implemented for log editing. **[Shift-F10]** displays the the save log dialog.
2. **Fix.** A situation where the database table containing stations did not get activated if there are no stations defined has been corrected. This prevented the end-user from adding stations in the preferences area.

Version 2.4.3.70 - 05/30/2008

1. **Change.** Version numbers of the "ez" series of products, including ezSuite, have been synchronized. These products share several pieces of core functionality and the version numbering change was made to reflect this.
2. **Enhancement.** When editing a cart (spot) record or a play cart directive record, each character of the cart number is now checked to be sure it is valid. This prevents entry of invalid cart numbers. Valid characters for a cart number include: A..Z, 0..9, {, }, !, #, %, ^, @, =, +.
3. **Fix.** When exporting a Log Validation report to file, the text had very narrow margins, resulting in a less-than-readable report. The exported report now formats properly when saved to file.
4. **Fix.** An **eDatabaseError** that could occur when installing and starting ezSuite for the very first time has been corrected.
5. **Fix.** A spelling error on the configuration password dialog has been corrected.

Version 2.0.2.68 - 07/06/2007

1. **Enhancement.** Changes have been made to the way ezSuite handles loading and saving preference information to improve performance. Improvement is particularly noticeable if ezSuite is launched from a network drive.

Version 2.0.1.66 - 07/02/2007

1. **Change.** Since log templates and XStudio emergency logs are considered "undated", date-checking of carts is no longer done when working with these types of logs. Missing carts, though, continue to be flagged if you have an inventory loaded and [Cart Status Display](#) is enabled.
2. **Change.** The exclamation point (!) has been added to the list of acceptable cart mask characters. Although DCS and Maestro documentation indicate it is an invalid character to use when naming carts, it is not enforced.

Version 2.0.0.65 - 06/08/2007

1. **Change.** The ezSuite preferences file is now kept in the application directory (install folder). If you updated the software using the standard installer, the installation process should have been able to move the preferences file from the Windows folder, where it had been located in previous versions. If the move failed, you can still manually copy the preferences file to the application folder.
2. **Change.** The PC characteristics considered when registering ezSuite has been changed. If you

updated the software using the standard installer, the installation process automatically updated your registration. On rare occasions, the automatic update could fail, particularly you updated from a very old version of ezSuite. If the automatic registration update failed, contact your vendor to obtain a new registration key. You will need to supply the original registration serial number and machine ID information to obtain your new registration.



If you previously experienced a problem with ezSuite complaining that your registration was invalid as a result of either adding or removing a USB device that registers itself as fixed disk, you should now be able to add or remove the device without a registration error.

3. **Enhancement.** ezSuite has been updated to correctly handle new 2007 DST dates and dates prior to 2007. See the topic [Time Zone Information](#) for details on DST date changes made in 2007, along with their impact on tools like ezSuite.
4. **Fix.** The date on which a switch to or from DST occurs now reports the event time (Real Time) properly. Previously, the entire day was processed using either the DST offset or standard time offset. Now, each time is evaluated to determine whether or not the target switch **time** has been met, generally 2:00 AM for most time zones that observe DST.
5. **Enhancement.** The ability to save a log using old-style 4-character log length data has been added. See the topic [Log Options](#) in Preferences. This option should be used only if you are working with another application that cannot handle the default 5-character (**mmmss**) log lengths.
6. **Enhancement.** In addition to the standard list of Commercial Types provided, you can now manually enter a commercial type code when editing a spot (cart) record.
7. **Enhancement.** Log Templates can now be opened from the main dialog. Previously, users had to first open a log editing dialog before being able to open a log template.
8. **Change.** The help documentation has been updated to work with Windows Vista. Vista does not as a default support the traditional help file (*.HLP). The help documentation is now supplied as a compiled HTML file (*.CHM).



[Microsoft Security Update 896358](#) not only fixes a vulnerability in HTML Help, it prevents HTML Help files from execution if the CHM file is installed on a network drive. CHM files installed locally continue to work.

Symptoms: When you open a CHM file from a UNC path or from a network drive even if the network drive is mapped to a drive letter, the HTML Help viewer opens and instead of displaying the topic, it displays an error message "Action canceled" in the topic pane.

Solutions: Install the application on a local drive to avoid this problem. Alternatively, there are some registry changes that can be made manually to re-enable using CHM help files from a network drive. A free [HTML Help Registration Utility](#) is available at the EC Software web site.

Version 1.4.0.56 - 12/01/2006

1. **Enhancement.** Support for creating, editing, saving and inserting log templates has been added (*.FMT files). Users can now save any log as a template, edit the template and insert the template in a log or another template.
2. **Enhancement.** Log Reconcile has been changed to optionally allow the user to use a "**proximity search**" when reconciling a log. Proximity searches can be based on either minutes or log

positions. These methods provide a means to more accurately reconcile a log when the original logged time of an item was changed but the original source log does not reflect the changed time. If one of the proximity search options is enabled, the reconcile process will look back and look forward from the logged time in an attempt to find a matching audit record, based on the log time. The search "window" is set by the end-user, allowing flexibility in how "close" the item must be before a "match" is declared. The default behavior of Log Reconcile is to not use a proximity search.

3. **Enhancement.** Users can now import/export cart category information. The features are accessible via a pop-up menu on the cart category maintenance page in Preferences.
4. **Enhancement.** The application event log, where details of program operation are stored, is now automatically maintained so as not to grow beyond 2MB in size. Additional detail on user actions is now placed in the event log.
5. **Enhancement.** The "Function" column in audit reports will now optionally display XStudio's log record ID number. The XStudio log record ID is a unique value for a given log and follows the log record even if the record is moved.
6. **Enhancement.** The log editing dialog for creating and editing log Directives has been enhanced to add support for XStudio-specific directive keys "**Hard Sync**" and "**Resume Automation**".
7. **Enhancement.** Support for creating, editing and saving XStudio emergency logs has been added.
8. **Fix.** If a user cleared the Description field when editing a log Directive and then selected a different directive type, a program AV would occur. This has been corrected.
9. **Fix.** If an audit report contained invalid audio switcher data, a program AV would occur, resulting in a less than complete report display. This has been corrected.

Version 1.3.1.45 - 06/26/2006

1. **Fix.** Log Editing. When dragging a log item to a later time, auto-scroll would not work if the log's horizontal scroll bar was not visible. The inventory list area and the status bar now detect the log drag operation and enable auto-scroll.

Version 1.3.0.42 - 03/07/2006

1. **Enhancement.** Log Editing. Users can now set text and background colors for defined cart filters (cart categories). The [Preferences | Cart Filters](#) page has been re-designed to provide the means to assign text and background colors to each defined cart filter. The color combinations selected are applied to matching audio items on the log, providing a quick visual indicator of the items' category.
2. **Enhancement.** Log Editing. Users can now select a font style of their choosing for log text, along with the font size (in a range of 8 - 20 points) and whether or not the audio items will be displayed in bold text. Log font settings are located on the [Preferences | Misc](#) page.

Version 1.2.5.36 - 02/08/2006

1. **Fix.** An exception would occur if the last hour of the log - the 11:00 PM hour - had content that exceeded 1 hour and an element in the hour ended up with an estimated airplay time of 24:00:00 (midnight of the following day).
2. **Fix.** If a cart's length was edited, but nothing else changed, the hourly totals display was not being updated correctly.
3. **Change.** The visual appearance of certain controls in the application now conform to the Windows XP look.

Version 1.2.3.33 - 10/10/2005

1. **Change.** Minor changes have been made in the format of the debug log text.

Version 1.2.2.32 - 08/19/2005

1. **Fix.** A change was made to correct a problem where the type code for a program title log item was being stored incorrectly.

Version 1.2.1.31 - 08/05/2005

1. **Fix.** Corrected a problem that occurred when trying to save an edited log with the save button on the toolbar. The save would not occur until the File menu had been accessed.

Version 1.2.0.30 - 06/06/2005

1. **Enhancement.** Log Editing. An option has been added to display log times as estimated air play times. The estimated play time is hour-based, meaning that the first item in a given hour is estimated to play at the straight-up of the hour. This option is useful mainly for stations running local automation.
2. **Enhancement.** Log Editing. Log display column widths can now be modified by the user. The changed widths are restored at program startup.
3. **Fix.** Audit Reporting. Items with no cart number are now properly not included when using a cart number filter.
4. **Enhancement.** Users can now hide the tool bar if desired. The tool bar state (visible or hidden) is saved and restored on program startup.
5. **Enhancement.** Event log display and search settings are now saved on exit and restored the next time the event log is viewed.

Version 1.1.1.28 - 04/04/2005

1. **Enhancement.** The directive edit dialog has been revised to support additional directive types, including suspend automation.
2. **Enhancement.** Minor changes have been made to support longer function names generated by XStudio. The changes do not affect reporting on standard CCC audit files.

Version 1.1.1.26 - 02/14/2005

1. **Fix.** Handling of malformed logs, specifically invalid cart lengths in spot records, has been improved.

Version 1.1.0.25 - 12/16/2004

1. **Enhancement.** Multi-Day Audit Reports have been added. You can now create an audit report that spans multiple days for a station. See the section on [Multi-Day Reports](#) for more information.
2. **Enhancement.** Users can now modify or create their own audit report data views. Functionality to edit, create, copy, and delete data views is included. See the section on [User-Defined Data Views](#) for more information.
3. **Enhancement.** Users can now create custom fields and include them in custom data views. Functionality to create, edit, and delete custom fields is included. See the section on [User-Defined Fields](#) for more information.

Version 1.0.5.21 - 12/08/2004

1. **Enhancement.** The ability to jump to a specific time in an audit report has been added. Pressing the [F2] key displays a dialog to enter the time to search for. The search finds the nearest match to the time entered. This option is also available from the **Edit** menu.
2. **Enhancement.** On-demand refresh of the data for the current audit report has been added. Pressing the [F5] will reload all audit data from the DCS, Maestro or XStudio audit data file. This is useful primarily when viewing an audit report for today, where additional information may be added to the audit data file by the audio system during the time a report is being viewed. This option is also available from the **Edit** menu.
3. **Enhancement.** Commercial Type "**Sponsor**" (SPN) has been added to the list of available types when editing an audio element.

Version 1.0.5.20 - 12/05/2004

1. **Enhancement.** On-demand updating of log spot records, including Description and Length, has been added. Users can choose to update all audio records in a log - cart length only, description only or both cart length and description. This is particularly useful if a log was edited and saved with an editor that does not support the newer cart length style (mmm:ss). CMED versions prior to 2.4 do not support the extended 999 minute 59 second cart length field - earlier log editor versions supported only 99 minutes 59 seconds for a cart length. See the section in [Troubleshooting](#) that further describes the problem.
2. **Enhancement.** Users can now enable or disable extended text logging, using the **Help | Debug Mode** menu item.
3. **Enhancement.** When viewing a text file, users can now search the displayed text for any combination of information. Searches can be forward or backward from current location and can be case-sensitive, if desired.
4. **Enhancement.** Additional error logging has been added to better support end-users.
5. **Fix.** When a log validation dialog was closed, other remaining dialogs' status bars were not updated correctly.

Version 1.0.4.16 - 12/31/2003

1. **Enhancement.** Audit report displays of relay (Din) data has been revised for enhanced readability. Relay transactions that are internal functions (relays) are now displayed as "Internal" with the DCS/Maestro function number. External relays (Bus A-D, Din 12-19) are displayed as before with the addition of the DCS/Maestro function number.

Version 1.0.3.15 - 12/02/2003

1. **Enhancement.** Log validation has been revised to optionally include cart length-checking. Users can select a +/- range of zero (disabled) to 30 seconds in 5-second increments. The validation report will indicate those carts that have a length problem, i.e., a 60-second spot is ordered, but the inventory cart length is 30 seconds.
2. **Enhancement.** The log validation error display now includes the ability to do some additional data views, enhancing the drill-down capabilities of log validation. Users can now display date problems only, length problems only, missing carts only and grouped views of the data, including grouping by error and grouping by cart number.

Version 1.0.2.14 - 09/27/2003

1. **Fix.** Fixed a problem with audit reports not printing the last page of a report in some cases. The problem manifested itself mostly in Win9x OS's, but could also show up in Windows NT v4. The problem could also appear in inventory, validation or reconcile reports, although none were reported.

Version 1.0.2.13 - 09/20/2003

1. **Enhancement.** Column widths of the data views in audit reports, log validation and log reconcile are now saved and restored. If you change the width of a column in one of these dialogs, that width will be restored next time you use the dialog. Use the menu item **"Help | Reset Display Defaults"** to re-set the column widths to the defaults next time the program is started.
2. **Enhancement.** Print preview is now available for inventory reports in log editing, audit reports, log validation reports and log reconcile reports. Where applicable, users can choose to preview all data in the report or just items that you have selected.
3. **Fix.** Audit reporting. Corrected a problem with decoding switcher information when the switcher command was for setting the Pulse Timing. ezSuite would report an error similar to *"an invalid value passed to argument %n"* and processing of the display data would stop, leaving the user with only a partial display of the audit data.
4. **Fix.** Under unusual conditions, the audit report view would generate an error when a row with incomplete data was selected. This error would occur when data was missing from one or more columns in the row, usually as the result of an error in retrieving the information from the audit data.

Version 1.0.1.12 - 05/05/2003

1. **Fix.** A change has been made to the saving of edited log files to ensure that the date/time stamp of the saved file is updated. A very few users reported that when using an NT Gateway to a NetWare server, the newly-saved log file's date/time stamp was not changed. The result was that the DCS or Maestro machine using the log did not recognize the log had been changed and did not refresh the log.
2. **Fix.** A minor change to process of loading a log has been made to ensure that a log saved by another application and somehow corrupted, will load properly. The problem seen by a few users was that the application saving the file would inadvertently not properly terminate a log record (item) and ezSuite would subsequently save the log, after editing, with this improper termination.
3. **Enhancement.** The About display has been updated to include more information about the PC on which ezSuite is running. Users can now save this information to a text file, if needed, for troubleshooting. The display will now appear more quickly, too, as the calculation of the host PC's CPU speed has been improved and takes less time to complete.
4. **Fix.** Changes have been made to the routine that attempts to "fix" log times when a log is loaded. This process tries to correct invalid log times - times that are out-of-sequence (i.e., a log note with a time of 10:13 appearing on the log AFTER another non-spot time with a time of 10:14). Logic has been improved to catch and correct more of these kinds of input log problems.



The log fix-up report that is generated when changes are made to log times now includes changes made to spot times, too. The spot time changes appear at the end of the report.

Version 1.0.0.11 - 03/07/2003

1. **Enhancement.** Log Editing. Changes have been made to the directive edit dialog to better identify the original directive when editing. The edit process now correctly adds or removes the characters '~' and '\$' when changing directive types from or to time-approximate and cast-off directives.
2. **Enhancement.** Log Editing. Additional log fix-up logic has been added to handle malformed logs that contain a colon (:) in the spot length field. If such spot records are found during the loading of a log, they will be corrected and the user is notified changes have been made.

Version 1.0.0.10

1. Initial release of ezSuite.

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